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February 18, 2005

Ms. Barbara Seiminsky
CRWQCB – San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: **Well Installation and Oxygen Injection Feasibility Test Report**
7-Eleven Store #20224
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20224.04.0502

Dear Ms. Seiminsky:

This report was prepared by SECOR International Incorporated (SECOR), on behalf of 7-Eleven Inc., to document the installation of three oxygen injection wells (I-1 through I-3) at 7-Eleven Store # 20244, located at 3625 MacDonald Ave., Richmond, California (Figures 1 and 2).

INTRODUCTION

The site is a 7-Eleven convenience store and former gasoline service station (Figures 1 and 2). Underground storage tanks (USTs) no longer exist at the site. The work was completed following SECOR's September 14, 2004 *Work Plan for Remediation Well Installation and Oxygen Injection Feasibility Test* approved by the California Regional Water Quality Control Board (CRWQCB) in a letter dated October 4, 2004 (Attachment A). The three wells will be used to conduct an oxygen injection test to stimulate bacterial consumption of gasoline range petroleum hydrocarbons beneath the site.

This report summarizes the following:

1. Obtaining permits and preparing a health and safety plan.
2. Clearing boring locations using Underground Service Alert (USA) and a private utility locator.
3. Drilling and sampling three hollow stem auger soil borings.
4. Installing three oxygen injection wells.
5. Testing the feasibility of oxygen injection using the three newly installed wells.

SITE BACKGROUND AND PREVIOUS INVESTIGATIONS

On May 20, 1998, Fluor Daniel GTI supervised the advancement of four Geoprobe borings (GP-1 through GP-4) adjacent to the two 10,000-gallon USTs at the site. The work was required by the Contra Costa Environmental Health Department (CCEHD) prior to a proposed re-lining of the two 10,000-gallon USTs as part of a fuel system upgrade at the site. Soil sample analytical data indicated maximum benzene and total petroleum hydrocarbons as gasoline (TPHg) concentrations of 0.048 milligrams per kilogram (mg/kg) and 1.3 mg/kg, respectively. Methyl-tert-butyl ether (MtBE) was detected at a maximum concentration of 0.62 mg/kg. Grab groundwater samples collected from the bases of the

borings contained up to 19 micrograms per liter (ug/L) benzene, 11,000 ug/L TPHg, and 4,800 ug/L MtBE. Based on analytical data from the Geoprobe borings, permit approval to upgrade/reline the USTs at the site was denied by the CCEHD, and the tanks were subsequently removed from the site.

On December 16, 1998, two 10,000-gallon USTs and one 6,000-gallon UST (with associated product piping) were removed from the site, and were not replaced. Analytical results of nine soil samples collected indicated that the highest residual benzene (0.0156 mg/kg), TPHg (110 mg/kg), MtBE (1.59 mg/kg) and tert-butyl alcohol (TBA) (0.865 mg/kg) concentrations were detected beneath the eastern end of the tank excavation and beneath the southern end of the fuel dispenser island

To remove as much hydrocarbon adsorbed to soil as possible, the floor of the UST pit was excavated to a depth of 14.5 feet below ground surface (bgs) and the dispenser island area was excavated to a depth of 5 feet bgs. Maximum concentrations of benzene (0.2 mg/kg) and TPHg (68 mg/kg) were detected beneath the south end of the dispenser island excavation. The highest MtBE concentration (7.3 mg/kg) was detected beneath the southeast corner of the UST excavation. The southern end of the dispenser island excavation was further excavated to 8.5 feet bgs. A soil sample collected from the floor of the excavation contained MtBE (0.28 mg/kg) and did not contain detectable benzene and TPHg concentrations.

The California Regional Water Quality Control Board (CRWQCB) requested further assessment based upon the initial site investigation results. On January 22, 1999, IT Corporation supervised the installation of three 2-inch diameter groundwater monitoring wells (MW-1, MW-2, and MW-3). Benzene, TPHg, and MtBE concentrations in soil ranged up to 9.19 mg/kg, 1,330 mg/kg, and 12 mg/kg, respectively.

In September 1999, six Geoprobe soil borings (SB-1 through SB-6) were drilled at the site to total depths of between 19.5 and 28 feet bgs. TPHg was reported in soil at concentrations up to 20.4 mg/kg. Benzene, MtBE, and other oxygenates were not detected above laboratory reporting limits in the soil samples. Grab groundwater samples collected at the total depth of each boring contained dissolved concentrations ranging up to 1.12 ug/L benzene, 6.93 ug/L TPHg, and 6.79 ug/L MtBE.

On August 24, 2001, IT Corporation supervised the installation of two 2-inch diameter groundwater monitoring wells (MW-4 and MW-5). Benzene and MtBE were not detected in soil at concentrations above laboratory reporting limits. TPHg concentrations in soil reached a maximum of 12 mg/kg in sample MW-5 (10-10.5 bgs).

On September 14, 2004, SECOR submitted a *Work Plan for Remediation Well Installation and Oxygen Injection Feasibility Test* to the RWQCB. The work plan proposed the installation of three oxygen injection wells (I-1 through I-3) and conducting an oxygen injection feasibility test. The work plan was approved by the RWQCB in a letter dated

October 4, 2004. Oxygen injection wells I-1 through I-3 were installed on December 14-15, 2004.

SOIL BORING, SAMPLING, AND WELL INSTALLATION

Permitting/Site-Specific Health and Safety Plan/Utility Clearance
Prior to installation of the wells, SECOR obtained well installation permits from the Contra Costa County Environmental Health Department (Attachment B).

SECOR prepared a site-specific Health and Safety Plan for well installation and sampling activities at the site as required by the Occupational Health and Safety Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120). The document was reviewed and signed by SECOR personnel and subcontractors performing work at the site.

Prior to conducting subsurface work at the site, Underground Service Alert (USA) was contacted to delineate subsurface piping near the site with surface markings. In addition, a private utility locator service was contracted to clear the area surrounding the proposed boring locations.

Soil Borings
On December 14 and 15, 2004, SECOR supervised Gregg Drilling of Martinez, California, in the drilling and installation of three oxygen injection wells at the locations shown on Figure 2. The oxygen injection wells were installed to 27 feet bgs using 8-inch diameter hollow stem augers.

The well construction details are shown in Table 1 and field notes documenting the well installation activities are presented in Attachment C.

Soil Sampling
Soil samples were collected using a split spoon sampler lined with 2-inch diameter by 6-inch-long brass sample tubes. Downhole drilling equipment was steam cleaned before drilling each borehole, and sampling equipment was cleaned between each sampling interval. Each soil sample was screened for hydrocarbon vapors using a portable photoionization detector (PID). Soils encountered during drilling were logged by a SECOR field geologist using the Unified Soil Classification System, under the supervision of a California registered geologist.

Lithology
Soil encountered consisted primarily of clay from 2 to 10 feet bgs, sand, silty sand, and sandy silt from 10 feet bgs and continuing to approximately 27 feet bgs. Each of the three borings encountered groundwater at 12 to 13 feet bgs. These findings are generally consistent with the descriptions provided in previous assessment reports. Copies of the soil boring logs are presented in Attachment D.

Well Installation

The oxygen injection wells, I-1 through I-3, were drilled to depths of 27 feet bgs and constructed of ¾-inch diameter schedule 40 PVC blank casing and a 2.5-foot long ceramic sparging diffuser tip (Table 1). The diffuser tips were set from 24.5-feet bgs to 27-feet bgs in each injection well. A sand filter pack was placed within the annulus of each well, from the bottom of the boring to approximately one foot above the top of the sparge tip. The annulus of each well was sealed with four feet of bentonite on top of the sand and capped with a Portland cement grout to the surface. The oxygen injection wells were sealed using a locking expansion cap and secured with a water tight 12-inch-diameter traffic rated street box. Copies of the field notes documenting the well installations are provided in Attachment C.

Soil Sample Results

TPHg, BTEX and MtBE were detected in the soil samples collected at 15 feet bgs from borings I-2 and I-3. TPHg and MtBE was also reported in the soil sample collected from I-1 at 15 feet. The highest concentrations were reported in the soil samples collected from soil boring I-3; TPHg, Benzene and MtBE were reported at 1400 mg/kg, 1.8 mg/kg, and 6.6 mg/kg, respectively. I-1 through I-3 contained measurable concentrations of MtBE in all sampled depth ranges. Soil analytical results are summarized in Table 2 and a copy of the analytical report is presented in Attachment E.

Groundwater Sampling and Well Surveying

Results of groundwater and sampling conducted on December 15, 2004 are summarized in Table 3. The top of casing elevations for the oxygen injection wells were not surveyed since they will be used for groundwater remediation purposes and not for groundwater monitoring and sampling.

Oxygen Injection Feasibility Test

On January 11 through 12, 2004, SECOR conducted an oxygen injection feasibility test on oxygen injection wells I-1 through I-3. 150 cubic feet (ft^3) of oxygen was injected into each of the wells over 45 to 60 minutes. During the test, oxygen injection pressures and flow rates into each injection well were recorded and lower explosive limit (LEL) oxygen concentrations were measured in monitoring wells MW-1 through MW-5. A rubber glove was placed over monitoring well MW-3 to qualitatively monitor oxygen transport to the well during oxygen injection into wells I-1, I-2 and I-3. The glove showed some inflation during injection of oxygen into wells I-1, I-2, and I-3, indicating transport of dissolved oxygen to the monitoring well. Dissolved oxygen (DO) concentrations were measured with a DO meter equipped with a down hole probe in adjacent monitoring wells MW-1 through MW-5 before, immediately following, and 24 hours after completion of the injection test.

Prior to the injection test, the DO concentrations in monitoring well MW-3, closest to the oxygen injection wells, was 2.5 milligrams per liter (mg/L). Immediately following the injection test, the DO concentration increased to 7.0 mg/L; 24 hours after completion of the

test, the DO concentration had declined to 2.0 mg/L. However, subsequent oxygen injection completed on January 25 and February 8, 2005 into wells I-1, I-2, and I-3 raised the post injection DO concentration in MW-3 to 17.6 mg/L. Results of the oxygen initial injection feasibility test and two additional periodic oxygen injection events are presented in Tables 4 and 5.

Based on these measurements it was determined that the radius of influence for oxygen injection is at least 17 feet and that oxygen injection is a feasible remedial alternative for this site. Field notes for the oxygen injection feasibility test are in Attachment C.

Waste Disposal

Soil and rinse water generated during drilling was temporarily stored onsite in properly labeled 55-gallon drums. Four discrete soil samples were collected from the drums and transported to Kiff Analytical under chain-of-custody documentation for profiling. The four discrete soil samples were combined in the laboratory into one composite sample SP-1(ABCD), and analyzed for TPHg, BTEX, and MtBE by EPA 8260B and for total lead via EPA method 6010B. The composite sample contained 0.011 mg/kg MtBE and 5.06 mg/kg total lead. BTEX and TPHg were not reported above the laboratory reporting limit. Copies of the analytical data are included in Attachment E.

On January 4, 2005, Belshire Environmental Services Inc. (BES) transported seven drums of non-hazardous soil to the TPS Technologies Soil Recycling facility located Adelanto, California. On January 7, 2005 BES transported one drum of rinsate water to Demenno Kerdoon facility located in Compton, California for disposal. Waste manifests are included as Attachment F.

SUMMARY AND CONCLUSIONS

SECOR oversaw the installation of three oxygen injection wells (I-1 through I-3). Analyses of soil samples collected from the wells indicate the maximum concentrations of TPHg, BTEX and MtBE are present at 15 feet bgs at the site. The initial oxygen injection test began January 11, 2005 and two additional periodic oxygen injection events were completed on January 25 and February 8, 2005. Based the the qualitative measurement of positive pressure measured in well MW-3 during injection in I-1, the oxygen injection radius of influence is estimated to be at least 17 feet. Significant increases in dissolved oxygen were observed in well MW-3 that indicate oxygen injection may be effective stimulating bacterial destruction of TPHg, BTEX, and MtBE dissolved in groundwater.

SECOR recommends conducting periodic oxygen injection into the three new injection wells until the second quarter of 2005. The second quarter groundwater concentration data will be evaluated to determine the remedial effectiveness. If significant increases of dissolved oxygen are maintained and a corresponding decrease in levels of dissolved

hydrocarbons in groundwater is detected in nearby wells, oxygen injection will be considered an appropriate remedial method for this site.

A modified corrective action plan will be submitted with a summary of the feasibility and pilot testing to date, provides locations of additional remedial wells if needed, and presents a site-specific remediation plan based on the results of this feasibility study and historical site data.

If you have questions concerning the information presented in this report, please call us at 916-861-0400.

Sincerely,
SECOR International Incorporated

Colin Ryan
Staff Geologist

Jaff Auchterlonie
Senior Geologist

Daniel J. Davis, R.G.
Senior Geologist

REGISTERED GEOLOGIST
DANIEL J. DAVIS
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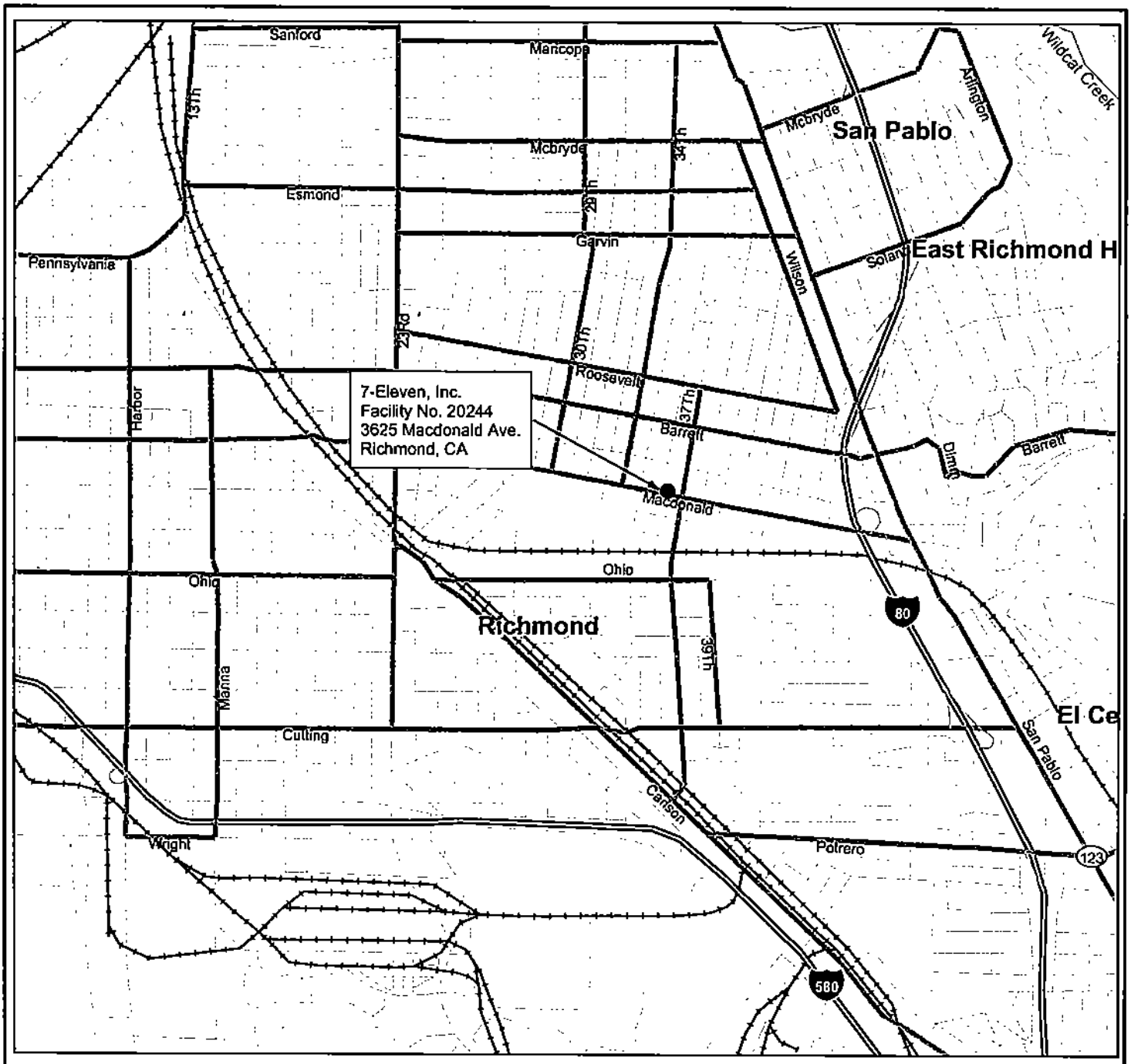
Attachments: Figures
Tables
Attachment A – Agency Corrispondance
Attachment B – Well Permits
Attachment C – Field Notes
Attachment D – Boring and Well Construction Logs
Attachment E – Certified Laboratory Analytical Reports and Chain of Custody Documentation
Attachment F – Wate Disposal Documentation

cc: File / 7-Eleven, Inc.
Mr. Paul Andrews, Contra Costa County Health Services

FIGURES

Map Document: (M:_GIS\7-Eleven\20244\EL-20244-Site Location Map v1 Fig1 A.mxd)
1/19/2005 -- 9:08:25 AM



Map Features

● Facility 20244

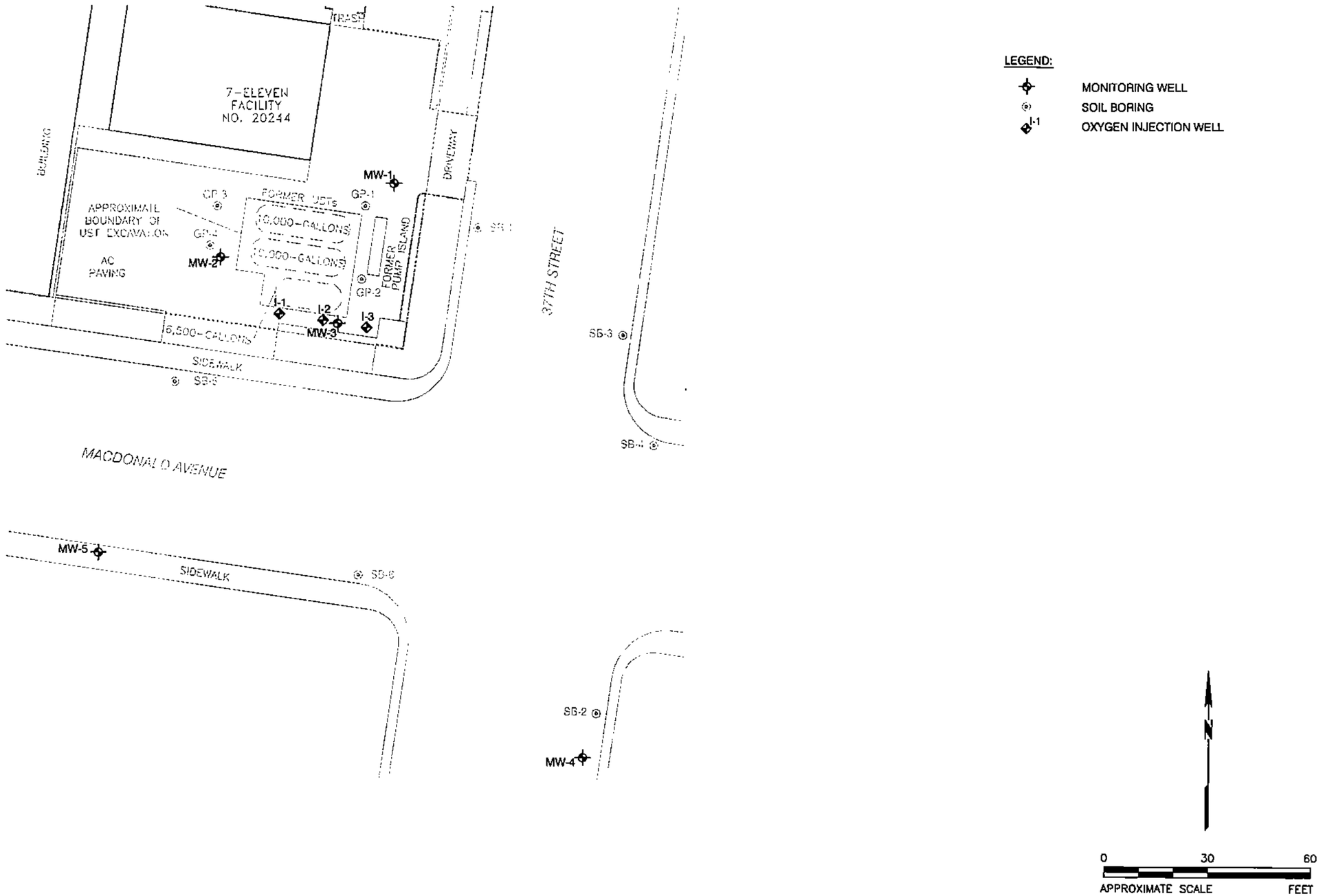
0 2,000 4,000 Feet

1 inch equals 2,000 feet

N

Basemap Data Source: ESRI® StreetMapUSA 2004

SECOR 3017 KILGORE ROAD, SUITE 100 RANCHO CORDOVA, CALIFORNIA PHONE: (916) 861-0400/861-0430 (FAX)	FOR: 7-ELEVEN, INC. FACILITY NO. 20244 3625 MACDONALD AVENUE RICHMOND, CA		**SITE LOCATION MAP**		FIGURE: **1**
	JOB NUMBER: 77EL.20244.04	DRAWN BY: RT	CHECKED BY: SG	APPROVED BY: JSA	DATE: 01/19/05



REFERENCE: THIS FIGURE IS BASED ON A "SITE PLAN" PROVIDED BY SHAW E & I, INC., DATED SEPTEMBER 2002, AND IS INTENDED FOR ILLUSTRATION ONLY.

SECOR

DRAWN	CBD
APPR	JSA
REV. DATE	1/5/05 DWR
JOB NO.	77EL.20244.04

FIGURE 2
7-ELEVEN, INC.
FACILITY NO. 20244
3625 MACDONALD AVENUE
RICHMOND, CALIFORNIA
SITE PLAN

M:\7-Eleven\20244\7-11_20244 SITEPLAN.dwg, 2/18/2005 8:40:42 AM, rtobys, \\fs0776\HP LaserJet 5000 Series PCL6, Sacramento

TABLES

Table 1
Soil Boring and Well Construction Details

7-Eleven Site No. 20244
3625 MacDonald Avenue
Richmond, California

Well I.D.	Drill Date	Well Depth (feet bgs)	Well Diameter (inches)	Screen Top (feet bgs)	Screen Bottom (feet bgs)	Screen Length (feet)	Comments
Soil Borings							
GP-1	05/20/98	21	1.5	--	--	--	Geoprobe boring
GP-2	05/20/98	21	1.5	--	--	--	Geoprobe boring
GP-3	05/20/98	16	1.5	--	--	--	Geoprobe boring
GP-4	05/20/98	18	1.5	--	--	--	Geoprobe boring
SB-1	09/17/99	19.5	1.5	--	--	--	Soil boring
SB-2	09/17/99	20	1.5	--	--	--	Soil boring
SB-3	09/17/99	28	1.5	--	--	--	Soil boring
SB-4	09/17/99	20	1.5	--	--	--	Soil boring
SB-5	09/17/99	20	2	--	--	--	Soil boring
SB-6	09/17/99	24	2	--	--	--	Soil boring
Monitoring Wells							
MW-1	01/22/99	20	2	5	20	15	
MW-2	01/22/99	20	2	5	20	15	
MW-3	01/22/99	24.5	2	5	20	15	
MW-4	08/24/01	24.5	2	14.5	24.5	10	
MW-5	08/24/01	24.5	2	14.5	24.5	10	
Oxygen Injection Wells							
I-1	12/15/04	27	0.75	24.5	27	2.5	Ceramic steel diffusion tip
I-2	12/14/04	27	0.75	24.5	27	2.5	Ceramic steel diffusion tip
I-3	12/14/04	27	0.75	24.5	27	2.5	Ceramic steel diffusion tip

Explanation
Wells are of poly-vinyl-chloride (PVC) construction
bgs = Below ground surface

Table 2
Soil Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Sample Number / Depth	Date	Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MTBE 8020 (mg/kg)	MTBE 8260 (mg/kg)	TBA 8260 (mg/kg)	DIPE 8260 (mg/kg)	ETBE 8260 (mg/kg)	TAME 8260 (mg/kg)	Notes
Geoprobe Soil Borings														
GP1-15	05/20/98	15	0.0021	0.0043	0.0065	0.0011	0.96	0.2	--	--	--	--	--	a
GP2-15	05/20/98	15	0.048	0.0330	0.032	0.038	1.3	0.62	--	--	--	--	--	a
GP3-15	05/20/98	15	<0.005	<0.005	<0.005	<0.005	<1.0	0.018	--	--	--	--	--	a
GP4-15	04/19/95	5	<0.005	<0.005	<0.005	0.00065	<1.0	0.049	--	--	--	--	--	a
UST and Dispenser Island Samples														
T-1E	12/16/98	12.5	<0.050	0.324	4.59	5.77	110	4.43	2.22	<5.00	<0.25	<0.25	<0.25	a
T-2E	12/16/98	13.5	0.0156	0.0015	0.0406	0.029	1.20	0.608	0.300	0.201	<0.0050	<0.0050	<0.0050	a
T-3E	12/16/98	13.0	<0.001	<0.001	0.0071	<0.001	0.528	0.432	0.167	0.229	<0.0050	<0.0050	<0.0050	a
T-1W	12/16/98	14.0	<0.0010	<0.0010	<0.0010	<0.0010	0.125	0.201	0.142	<0.100	<0.0050	<0.0050	<0.0050	a
T-2W	12/16/98	13.5	<0.0010	<0.0010	0.0084	0.0088	1.36	0.0415	0.0193	<0.100	<0.0050	<0.0050	<0.0050	a
T-3W	12/16/98	14.0	<0.0010	<0.0010	<0.0010	<0.0010	<0.100	<0.0010	<0.0050	<0.100	<0.0050	<0.0050	<0.0050	a
DP-1	12/16/98	4.0	<0.0010	<0.0010	<0.0010	<0.0010	0.211	0.368	0.167	0.115	<0.0050	<0.0050	<0.0050	a
DP-2	12/16/98	4.0	<0.0010	<0.0010	<0.0010	<0.0010	0.304	0.311	0.291	<0.100	<0.0050	<0.0050	<0.0050	a
DP-3	12/16/98	4.0	0.0076	<0.0010	0.0239	0.0056	1.06	0.812	1.59	0.865	<0.025	<0.025	<0.025	a
Excavation Soil Samples														
D1-N-5'	12/20/98	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	0.77	0.960	<0.10	<0.025	<0.025	<0.025	a
D1-S-5'	12/20/98	5.0	0.20	0.064	1.4	0.93	68	1	2	<0.50	<0.12	<0.12	<0.12	a
D1-S8.5'	12/20/98	8.5	<0.0050	<0.0050	0.0064	<0.0050	<1.0	0.15	0.28	<0.040	<0.010	<0.010	<0.010	a
TP-NE-14'	12/20/98	14.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	0.27	0.28	<0.10	<0.025	<0.025	<0.025	a
TP-SE-14'	12/20/98	14.0	<0.050	0.091	1.1	1.4	65	5.6	7.3	<2.0	<0.50	<0.50	<0.50	a
TP-NW-14'	12/20/98	14.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	a
TP-SW-14'	12/20/98	14.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.050	0.079	<0.020	<0.0050	<0.0050	<0.0050	a

Table 2
Soil Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Sample Number / Depth	Date	Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MTBE 8020 (mg/kg)	MTBE 8260 (mg/kg)	TBA 8260 (mg/kg)	DIPE 8260 (mg/kg)	ETBE 8260 (mg/kg)	TAME 8260 (mg/kg)	Notes
Groundwater Monitoring Wells														
MW-1	01/22/99	5	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
		10	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
		15	**0.0036**	<0.001	**0.0134**	**0.0444**	**2.5**	<0.01	<0.005	<0.1	**0.0056**	<0.005	<0.005	a
		20	<0.001	<0.001	<0.001	**0.0076**	**0.35**	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
MW-2	01/22/99	6	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
		10	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
		15	**0.0018**	<0.005	**0.0054**	**0.012**	**0.151**	<0.050	<0.005	<0.1	<0.005	<0.005	<0.005	a
		20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.005	<0.1	<0.005	<0.005	<0.005	a
MW-3	01/22/99	5	**0.0014**	<0.001	<0.001	<0.001	<0.1	**0.0269**	**0.0627**	<0.1	<0.005	<0.005	<0.005	a
		10	**0.0095**	<0.001	**0.0042**	<0.001	**0.169**	**0.0673**	**0.129**	<0.1	<0.005	<0.005	<0.005	a
		15	**9.19**	**39.6**	**29.8**	**109**	**1,330**	**10.5**	**12**	<10	<0.5	<0.5	<0.5	a
		20	**0.0093**	**0.0018**	**0.001**	**0.004**	**5.3**	**7.43**	**10.3**	<5	<0.25	<0.25	<0.25	a
		24.5	**0.0011**	**0.0029**	<0.001	**0.0011**	**0.639**	**1.17**	**1.67**	<0.5	<0.025	<0.025	<0.025	a
MW-4	08/24/01	5	<0.001	<0.001	<0.001	**0.003**	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b, c
		9	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b
		14	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b
		19	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b
		24	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b
MW-5	08/24/01	6	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	b
		10	<0.001	<0.001	<0.001	<0.001	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b
		14	<0.001	<0.001	**0.13**	**0.34**	**12**	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b, c
		19	<0.001	<0.001	**0.0035**	**0.0057**	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b, c
		24	<0.001	<0.001	<0.001	<0.003	<1	<0.005	<0.005	<0.1	<0.001	<0.001	<0.001	b, c

Table 2
Soil Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Sample Number / Depth	Date	Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MTBE 8020 (mg/kg)	MTBE 8260 (mg/kg)	TBA 8260 (mg/kg)	DIPE 8260 (mg/kg)	ETBE 8260 (mg/kg)	TAME 8260 (mg/kg)	Notes
Soil Borings														
SB-1	09/17/99	15	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
		20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
SB-2	09/17/99	10	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	15	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
SB-3	09/17/99	10	<0.001	<0.001	<0.001	<0.001	**0.118**	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	15	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	28	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
SB-4	09/17/99	10	<0.05	**0.162**	**0.33**	**0.324**	**20.4**	<0.5	<0.05	<1	<0.05	<0.05	<0.05	a
	09/17/99	15	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
SB-5	09/17/99	--	--	--	--	--	--	--	--	--	--	--	--	a
SB-6	09/17/99	10	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	15	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a
	09/17/99	20	<0.001	<0.001	<0.001	<0.001	<0.1	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	a

Table 2
Soil Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Sample Number / Depth	Date	Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MTBE 8020 (mg/kg)	MTBE 8260 (mg/kg)	TBA 8260 (mg/kg)	DIPE 8260 (mg/kg)	ETBE 8260 (mg/kg)	TAME 8260 (mg/kg)	Notes
Oxygen Injection Wells														
I-1	12/15/04	15	<0.0050	<0.0050	<0.0050	<0.0050	1.3	--	0.16	--	--	--	--	
		20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	--	0.30	--	--	--	--	
		25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	--	0.50	--	--	--	--	
I-2	12/14/04	15	0.22	<0.025	3.1	0.46	110	--	3.5	--	--	--	--	
		20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	--	1.5	--	--	--	--	
I-3	12/14/04	15	1.8	0.88	36	85	1,400	--	6.6	--	--	--	--	
		20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	--	1.3	--	--	--	--	
		25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	--	0.43	--	--	--	--	

Explanation

TPHg = Total petroleum hydrocarbons-as-gasoline
(BTEX and TPHg analyzed using EPA 8020/8015 modfied unless noted)
MIBE = Methyl-tert-butyl ether
TBA = Tert-butanol
DIPE = Diisopropyl ether
ETBE = Ethyl-tert-butyl ether
TAME = Tert-amyl-methyl ether

mg/kg = milligrams per kilograms (parts per million)
ft bgs = Feet below ground surface
a = Data from IT Group "Additional Subsurface Investigation Report" dated October 29, 1999.
b = Data from IT Group "Additional Site Assessment Report" dated October 14, 2001.
c = Method blank contamination for xylenes
-- = Not analyzed, Not applicable

Table 3
Historical Groundwater Monitoring and Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylene (µg/L)	TPHg (µg/L)	MtBE 8020 (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
Geoprobe Water Samples																			
GP-1W	05/20/98	12	7.9	15	0.68	1,400	83	--	--	--	--	--	--	--		--	--	--	--
GP-2W	05/20/98	19	72	29	72	11,000	6,500	4,800	<5,000	<250	<250	<250	--	--		--	--	--	--
GP-3W	05/20/98	2.5	1.1	<0.5	<0.6	470	55	--	--	--	--	--	--	--		--	--	--	--
GP-4W	05/20/98	0.5	2.4	11	43	1,400	2,500	--	--	--	--	--	--	--		--	--	--	--
Soil Boring Water Samples																			
SB-1W	09/17/99	<0.3	<0.3	<0.3	<0.6	121	<5	<5	<20	<5	<5	<5	--	--		--	--	--	--
SB-2W	09/17/99	0.78	1.16	<0.3	1.17	<50	6.93	6.79	<20	<5	<5	<5	--	--		--	--	--	--
SB-3W	09/17/99	1.12	<0.3	0.53	1.68	105	<5	<5	<20	<5	<5	<5	--	--		--	--	--	--
SB-4W	09/17/99	<0.3	3.65	0.85	4.6	781	<5	<5	<20	<5	<5	<5	--	--		--	--	--	--
SB-5W	09/17/99	<0.3	0.5	<0.3	<0.6	199	5.57	5.61	<20	<5	<5	<5	--	--		--	--	--	--
Monitoring Well Samples																			
MW-1																			
59.86	03/19/99	<0.3	<0.3	<0.3	<0.6	185	--	33.6	<20	10.4	<5	<5	--	--		1.5	10.34	0.00	49.52
	05/31/99	<0.3	<0.3	<0.3	<0.6	465	--	105	<20	18.6	<5	<5	--	--		1.0	12.77	0.00	47.09
	09/15/99	1.55	0.38	0.48	1.43	254	56.4	47.9	<20	14.5	<5	<5	--	--		--	14.60	0.00	45.26
	12/14/99	1.31	0.93	1.32	<0.6	351	51.6	34.7	<20	23.2	<5	<5	<1	<1		1.6	19.99	0.00	39.87
	03/01/00	<0.3	<0.3	<0.3	<0.6	249	10.9	13.2	<20	<5	<5	<5	--	--	a	1.7	8.15	0.00	51.71
	03/29/00	--	--	--	--	--	--	--	--	--	--	--	--	--		--	10.66	0.00	49.20
	06/05/00	<0.5	<0.5	<0.5	<1	140	--	29	<50	7.8	<2	<2	--	--		1.2	12.50	0.00	47.36
	09/18/00	<0.5	<0.5	<0.5	<1	360	--	55	<120	26	<5	<5	--	--		0.3	14.30	0.00	45.56
	12/04/00	<0.5	<0.5	<0.5	<1.5	180	--	21	<120	18	<5	<5	--	--		0.4	14.50	0.00	45.36
	03/12/01	<0.5	<0.5	<0.5	<1	120	--	13	<50	<2	<2	<2	--	--		0.5	10.30	0.00	49.56
	06/05/01	0.7	<0.5	<0.5	1	170	--	56	<50	20	<2	<2	--	--		0.6	14.00	0.00	45.86
	09/21/01	<0.5	<0.5	<0.5	<0.5	<50	--	130	23	26	<5	<5	--	--		0.6	15.70	0.00	44.16
	12/05/01	<0.5	<0.5	<0.5	<0.5	<50	--	14	<20	7.4	<5	<5	--	--		1.5	11.60	0.00	48.26
	03/01/02	<0.5	<0.5	<0.5	<0.5	<50	--	35	<20	18	<5	<5	--	--		1.3	11.91	0.00	47.95
	06/06/02	<0.5	<0.5	<0.5	<0.5	180	35	31	<10	13	<1	<1	--	--		--	13.35	0.00	46.51
	09/06/02	<0.5	0.85	<0.5	<0.5	190	27	27	7.4	13	<0.5	<0.5	--	--		1.1	14.82	0.00	45.04
	11/22/02	<0.5	<0.5	<0.5	<0.5	400	--	13	<5	9.9	<0.5	<0.5	--	--		1.0	14.82	0.00	45.04
	03/26/03	<0.50	<0.50	<0.50	<0.50	870	--	34	<5.0	6.3	<0.50	<0.50	--	--	c	0.3	11.91	0.00	47.95
	06/02/03	<0.50	<0.50	<0.50	<0.50	850	--	53	6.4	11	<0.50	<0.50	--	--	c	1.4	12.74	0.00	47.12
	09/02/03	<0.50	<0.50	<0.50	<0.50	730	--	25	<5.0	9.5	<0.50	<0.50	--	--	b,c	0.9	14.18	0.00	45.68
	12/22/03	<0.50	<0.50	<0.50	<0.50	640	--	9.9	<5.0	5.1	<0.50	<0.50	--	--	c	1.1	12.20	0.00	47.66
	03/10/04	<0.50	<0.50	<0.50	<0.50	380	--	24	<5.0	7.3	<0.50	<0.50	--	--	c	0.3	10.66	0.00	49.20
	06/16/04	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--
	09/27/04	<0.50	<0.50	<0.50	<0.50	460	--	22	<5.0	19	<0.50	<0.50	--	--	c	0.4	14.95	0.00	44.91
	12/15/04	<0.50	<0.50	<0.50	<0.50	590	--	15	<5.0	3.5	<0.50	<0.50	--	--	c	2.4	12.14	0.00	47.72

Table 3
Historical Groundwater Monitoring and Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylene (µg/L)	TPHg (µg/L)	MtBE 8020 (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2 DCA (µg/L)	EDB (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
MW-2																			
59.65	03/19/99	<0.3	<0.3	<0.3	<0.6	384	–	83.9	<20	<5	<5	<5	–	–		1.8	10.16	0.00	49.49
	05/31/99	<0.3	<0.3	<0.3	<0.6	578	--	262	<80	<20	<20	<20	--	--		1.7	12.60	0.00	47.05
	09/15/99	1.75	0.44	1.06	1.56	362	271	335	<20	<5	<5	<5	–	--		–	14.44	0.00	45.21
	12/14/99	1.03	0.57	1.05	<0.6	566	296	296	<40	<10	<10	<10	<2	<2		1.8	20.04	0.00	39.61
	03/01/00	<0.3	<0.3	<0.3	<0.6	434	63.3	71	<20	<5	<5	<5	–	--	a	1.8	8.10	0.00	51.55
	03/29/00	--	–	--	--	--	--	--	–	--	–	–	–	–		–	10.48	0.00	49.17
	06/05/00	<5	<5	<5	<10	400	–	500	<500	<20	<20	<20	–	–		1.5	12.33	0.00	47.32
	09/18/00	<0.5	<0.5	<0.5	<1	920	–	800	<620	<25	<25	<25	–	–		0.4	14.16	0.00	45.49
	12/04/00	<0.5	<0.5	<0.5	<1.5	480	–	400	<620	<25	<25	<25	--	--		0.5	14.37	0.00	45.28
	03/12/01	<0.5	<0.5	<0.5	<1	300	--	150	<100	<2	<4	<4	--	–		0.7	10.12	0.00	49.53
	06/05/01	1.5	<1	1.9	<2	440	--	410	<250	<10	<10	<10	–	–		0.8	13.85	0.00	45.80
	09/21/01	1.6	0.67	<0.5	0.52	<50	–	390	<100	<25	<25	<25	–	–		0.5	15.52	0.00	44.13
	12/05/01	<0.5	<0.5	<0.5	<0.5	<50	–	130	<20	<5	<5	<5	–	–		1.0	11.50	0.00	48.15
	03/01/02	<0.5	<0.5	<0.5	<0.5	<50	–	180	<20	<5	<5	<5	–	--		1.2	11.75	0.00	47.90
	06/06/02	<0.5	<0.5	<0.5	<0.5	400	120	120	<25	<2.5	<2.5	<2.5	–	--		--	13.18	0.00	46.47
	09/06/02	<0.5	<0.5	<0.5	<0.5	390	93	130	<25	<2.5	<2.5	<2.5	--	--		1.1	14.64	0.00	45.01
	11/22/02	<0.5	<0.5	<0.5	<0.5	670	--	78	<5	1.3	<0.5	<0.5	–	–		0.9	14.80	0.00	44.85
	03/26/03	<0.50	<0.50	<0.50	<0.50	1,800	--	45	<5.0	0.98	<0.50	<0.50	–	–	c	0.4	11.74	0.00	47.91
	06/02/03	<0.50	<0.50	<0.50	<0.50	1,800	–	39	<5.0	0.96	<0.50	<0.50	–	–	c	1.6	12.56	0.00	47.09
	09/02/03	<0.50	<0.50	<0.50	<0.50	1,300	–	44	<5.0	1.6	<0.50	<0.50	--	--	b,c	0.4	13.99	0.00	45.66
	12/22/03	<0.50	<0.50	<0.50	<0.50	1,100	--	26	<5.0	0.84	<0.50	<0.50	--	–	c	0.5	12.03	0.00	47.62
	03/10/04	<0.50	<0.50	<0.50	<0.50	1,100	–	18	<5.0	0.83	<0.50	<0.50	–	–	c	0.4	10.49	0.00	49.16
	06/16/04	<0.50	<0.50	<0.50	<0.50	1,300	--	19	<5.0	0.61	<0.50	<0.50	–	–	c	0.6	13.57	0.00	46.08
	09/27/04	<0.50	<0.50	<0.50	<0.50	1,200	–	20	<5.0	1.5	<0.50	<0.50	--	--	c	0.2	14.76	0.00	44.89
	12/15/04	<0.50	<0.50	<0.50	<0.50	1,600	--	14	<5.0	0.72	<0.50	<0.50	–	–	c	1.1	11.97	0.00	47.68

Table 3
Historical Groundwater Monitoring and Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylene (µg/L)	TPHg (µg/L)	MtBE 8020 (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
MW-3																			
59.59	03/19/99	696	786	552	777	62,400	–	84,400	<8,000	<2,000	<2,000	<2,000	–	–		1.0	10.73	0.00	48.86
	05/31/99	664	406	435	402	39,200	--	92,800	<20,000	<5,000	<5,000	<5,000	–	–		1.2	12.91	0.00	46.68
	09/15/99	386	104	263	206	34,100	65,200	80,100	<8,000	<2,000	<2,000	<2,000	--	–		–	14.54	0.00	45.05
	12/14/99	515	<30	310	67	27,600	97,000	81,900	<10,000	<2,500	<2,500	<2,500	<500	<500		1.9	20.03	0.00	39.56
	03/01/00	701	744	509	927	47,300	63,300	59,100	<2,000	<500	<500	<500	–	–	a	2.0	11.24	0.00	48.35
	03/29/00	–	--	--	--	--	–	--	–	–	–	--	–	–		–	10.58	0.00	49.01
	06/05/00	770	74	120	<10	15,000	–	54,000	<50,000	<2,000	<2,000	<2,000	--	–		1.7	11.88	0.00	47.71
	09/18/00	300	<5	110	<10	23,000	–	47,000	<50,000	<2,000	<2,000	<2,000	–	--		0.3	15.38	0.00	44.21
	12/04/00	490	13	360	86	22,000	--	42,000	<50,000	<2,000	<2,000	<2,000	–	–		0.5	14.32	0.00	45.27
	03/12/01	370	95	180	180	17,000	–	52,000	<50,000	<2	<2,000	<2,000	–	–		0.7	11.20	0.00	48.39
	06/05/01	310	<12	100	<25	17,000	–	47,000	<62,000	<2,500	<2,500	<2,500	–	–		0.5	14.46	0.00	45.13
	09/21/01	240	<10	120	<10	9,900	–	69,000	<10,000	<2,500	<2,500	<2,500	–	–		0.4	15.57	0.00	44.02
	12/05/01	430	<5	310	19	6,100	–	75,000	<10,000	<2,500	<2,500	<2,500	--	–		0.9	12.10	0.00	47.49
	03/01/02	580	270	390	<10	11,000	–	35,000	<10,000	<2,500	<2,500	<2,500	–	--		1.1	12.42	0.00	47.17
	06/06/02	510	76	370	24	7,500	40,000	37,000	<10,000	<1,000	<1,000	<1,000	–	--		–	13.70	0.00	45.89
	09/06/02	340	33	220	<10	2,900	36,000	43,000	<10,000	<1,000	<1,000	<1,000	–	–		1.0	14.78	0.00	44.81
	11/22/02	330	<50	210	<50	<5,000	–	35,000	840	<50	<50	<50	–	–		0.9	14.93	0.00	44.66
	03/26/03	490	<100	310	<100	<10,000	–	47,000	<1,000	<100	<100	<100	–	–		0.2	11.99	0.00	47.60
	06/02/03	400	<100	290	<100	<10,000	–	41,000	<1,000	<100	<100	<100	--	--		0.3	12.71	0.00	46.88
	09/02/03	160	<100	<100	<100	<10,000	--	43,000	<1,000	<100	<100	<100	–	--		0.2	14.16	0.00	45.43
	12/22/03	270	<50	130	<50	<5,000	–	34,000	<500	<50	<50	<50	–	--		0.5	12.34	0.00	47.25
	03/10/04	380	6.0	280	21	4,700	–	42,000	860	1.2	12	42	--	–	d	0.2	11.83	0.00	47.76
	06/16/04	360	<100	260	<100	<10,000	–	38,000	<1,000	<100	<100	<100	--	–		0.5	13.80	0.00	45.79
	09/27/04	340	<50	360	<50	<5000	--	25,000	7,600	<50	<50	<50	–	–		0.1	14.95	0.00	44.64
	12/15/04	310	<50	270	76	5,300	–	18,000	6,200	<50	<50	<50	–	–		0.9	12.28	0.00	47.31

Table 3
Historical Groundwater Monitoring and Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylene (µg/L)	TPHg (µg/L)	MtBE 8020 (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
MW-4																			
59.20	09/21/01	**3.3**	<0.5	**2.4**	**0.84**	**210**	–	**1,100**	<100	<25	<25	<25	--	–		0.7	16.10	0.00	43.10
	12/05/01	<0.5	<0.5	<0.5	**0.65**	**92**	–	<5	<20	<5	<5	<5	--	–		0.7	13.55	0.00	45.65
	03/01/02	<0.5	<0.5	<0.5	<0.5	<50	--	<5	<20	<5	<5	<5	--	--		0.9	13.73	0.00	45.47
	06/06/02	<0.5	<0.5	<0.5	<0.5	<50	<5	**0.62**	<5	<0.5	<0.5	<0.5	–	–		–	14.50	0.00	44.70
	09/06/02	<0.5	<0.5	<0.5	<0.5	<50	<5	<0.5	<5	<0.5	<0.5	<0.5	--	–		1.0	15.35	0.00	43.85
	11/22/02	<0.5	<0.5	<0.5	<0.5	<50	–	**0.64**	<5	<0.5	<0.5	<0.5	--	–		1.3	15.42	0.00	43.78
	03/26/03	<0.50	<0.50	<0.50	<0.50	<50	–	**0.93**	<5.0	<0.50	<0.50	<0.50	–	–	b	0.3	13.58	0.00	45.62
	06/02/03	<0.50	<0.50	<0.50	<0.50	<50	--	**1.1**	<5.0	<0.50	<0.50	<0.50	–	–		1.8	14.23	0.00	44.97
	09/02/03	<0.50	<0.50	<0.50	<0.50	<50	--	**1.6**	<5.0	<0.50	<0.50	<0.50	–	–	b	1.7	14.74	0.00	44.46
	12/22/03	–	–	–	–	--	--	–	--	–	--	–	–	–		–	--	–	--
	03/10/04	<0.50	<0.50	<0.50	<0.50	<50	–	**0.89**	<5.0	<0.50	<0.50	<0.50	--	–		0.3	12.99	0.00	46.21
	06/16/04	<0.50	<0.50	<0.50	<0.50	<50	–	**1.9**	<5.0	<0.50	<0.50	<0.50	--	–		0.8	14.91	0.00	44.29
	09/27/04	<0.50	<0.50	<0.50	<0.50	**72**	–	**2.5**	<5.0	<0.50	<0.50	<0.50	--	--	c	0.9	15.61	0.00	43.59
	12/15/04	<0.50	<0.50	<0.50	<0.50	<50	–	**0.59**	<5.0	<0.50	<0.50	<0.50	–	–		1.8	13.90	0.00	45.30
MW-5																			
58.94	09/21/01	**1.1**	**0.52**	**1.4**	**1.6**	<50	–	<5	<20	<5	<5	<5	--	–		0.5	15.35	0.00	43.59
	12/05/01	<0.5	<0.5	<0.5	<0.5	<50	–	<5	<20	<5	<5	<5	--	–		1.1	12.60	0.00	46.34
	03/01/02	<0.5	<0.5	<0.5	<0.5	<50	–	<5	<20	<5	<5	<5	--	--		1.0	12.43	0.00	46.51
	06/06/02	<0.5	<0.5	<0.5	<0.5	<50	<5	**0.65**	<5	<0.5	<0.5	<0.5	–	–		--	13.40	0.00	45.54
	09/06/02	<0.5	<0.5	<0.5	<0.5	<50	<5	**0.53**	<5	<0.5	<0.5	<0.5	–	–		1.0	14.50	0.00	44.44
	11/22/02	<0.5	<0.5	<0.5	<0.5	<50	–	**0.75**	<5	<0.5	<0.5	<0.5	–	–		1.0	14.92	0.00	44.02
	03/26/03	<0.50	<0.50	<0.50	<0.50	<50	--	<0.50	<5.0	<0.50	<0.50	<0.50	--	--	b	0.5	12.20	0.00	46.74
	06/02/03	<0.50	<0.50	<0.50	<0.50	<50	--	<0.50	<5.0	<0.50	<0.50	<0.50	–	–		3.4	12.96	0.00	45.98
	09/02/03	<0.50	<0.50	<0.50	<0.50	<50	--	**0.79**	<5.0	<0.50	<0.50	<0.50	–	–	b	0.7	13.93	0.00	45.01
	12/22/03	<0.50	<0.50	<0.50	<0.50	<50	–	**0.72**	<5.0	<0.50	<0.50	<0.50	--	–		0.3	12.61	0.00	46.33
	03/10/04	<0.50	<0.50	<0.50	<0.50	<50	--	<0.50	<5.0	<0.50	<0.50	<0.50	–	--		0.3	11.26	0.00	47.68
	06/16/04	<0.50	<0.50	<0.50	<0.50	<50	–	<0.50	<5.0	<0.50	<0.50	<0.50	--	–		0.7	13.79	0.00	45.15
	09/27/04	<0.50	<0.50	<0.50	<0.50	<50	--	**0.56**	<5.0	<0.50	<0.50	<0.50	–	–		0.2	14.87	0.00	44.07
	12/15/04	<0.50	<0.50	<0.50	<0.50	<50	–	<0.50	<5.0	<0.50	<0.50	<0.50	--	--		2.3	12.40	0.00	46.54

Table 3
Historical Groundwater Monitoring and Analytical Data

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, CA

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylene (µg/L)	TPHg (µg/L)	MtBE 8020 (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)

Explanation

TPHg = Total petroleum hydrocarbons-as-gasoline
MtBE = Methyl-tert-butyl ether
TBA = Tert-butanol
DIPE = Diisopropyl ether
EtBE = Ethyl-tert-butyl ether
TAME = Tert-amyl-methyl ether

1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
DTW = Depth to water
SPT = Separate-phase hydrocarbon thickness
WTE = Water table elevation
TOC = Top of casing elevation in feet above mean sea level

µg/L = micrograms per liter
mg/L = milligrams per liter
— = Not sampled/not measured

Notes

Historical data prior to 03/26/03 sample date provided by Shaw E&I.
Samples analyzed using EPA Method 8260B starting with 03/26/03 sample date.
a = Suspected malfunction of gauging probe on 03/01/00; wells regauged 03/29/00.
b = Matrix Spike/Matrix Spike Duplicate Results for MtBE were affected by the analyte concentration already present in the un-spiked sample.
c = Hydrocarbons reported as TPHg do not exhibit a typical Gasoline chromatographic pattern.
d = TBA may be biased slightly high. A fraction of MtBE (typically less than 1%) converts to TBA during the analysis of water samples. Kiff considers this conversion effect to be mathematically significant in samples that contain MtBE/TBA in ratios of over 20:1.

Table 4
Oxygen Injection Summary

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California

Well Number	Date of Injection	Oxygen Injection Data: Oxygen Volume Injected (ft^3)	Mass Injected (pounds)	Length of Injection (hours)	Cumulative Mass Oxygen Injected (pounds)	Comments
I-1	01/11/05	150	13.4	1.0	13.4	I-1 Injected Alone
	01/25/05	150	13.4	1.0	26.7	I-1 Injected Alone
	02/08/05	150	13.4	1.0	40.1	I-1 and I-2 Injected Simultaneously
I-2	01/11/05	150	13.4	1.0	13.4	I-2 Injected Alone
	01/25/05	150	13.4	1.0	26.7	I-2 Injected Alone
	02/08/05	150	13.4	1.0	40.1	I-1 and I-2 Injected Simultaneously
I-3	01/11/05	150	13.4	0.8	13.4	I-3 Injected Alone
	01/25/05	150	13.4	1.0	26.7	I-3 Injected Alone
	02/08/05	150	13.4	0.8	40.1	I-3 Injected Alone
			120.2	Total Pounds Oxygen Injected		

Explanation

Dissolved Oxygen Readings collected using downhole meter
mg/L = milligrams per liter
ft^3 = cubic feet
1 ft^3 O_2 = 0.089 lb of O_2
-- = Not measured/not sampled

Table 5
Dissolved Oxygen Summary

7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California

Well ID	Date of Injection	Dissolved Oxygen Pre-Injection (mg/L)	Dissolved Oxygen Post Injection (mg/L)	Comments
Dissolved Oxygen Monitoring Wells				
MW-1	01/11/05	2.4	3.8	Oxygen Injection Event
	01/25/05	2.5	3.8	Oxygen Injection Event
	01/26/05	--	3.7	Oxygen Injection Event
	02/08/05	2.6	3.9	Oxygen Injection Event
MW-2	01/11/05	2.7	3.7	Oxygen Injection Event
	01/25/05	3.0	4.2	Oxygen Injection Event
	01/26/05	--	4.4	Oxygen Injection Event
	02/08/05	3.4	4.4	Oxygen Injection Event
MW-3	01/11/05	2.5	7.0	Oxygen Injection Event
	01/25/05	4.1	8.2	Oxygen Injection Event
	01/26/05	--	7.8	Oxygen Injection Event
	02/08/05	8.0	17.6	Oxygen Injection Event
MW-4	01/11/05	3.6	--	Oxygen Injection Event
	01/25/05	3.0	--	Oxygen Injection Event
	01/26/05	3.8	3.8	Oxygen Injection Event
	02/08/05	3.0	3.0	Oxygen Injection Event
MW-5	01/11/05	2.4	--	Oxygen Injection Event
	01/25/05	2.4	--	Oxygen Injection Event
	01/26/05	2.8	--	Oxygen Injection Event
	02/08/05	2.2	2.2	Oxygen Injection Event

Explanation
Dissolved Oxygen collected using downhole meter
mg/L = milligrams per liter
-- = Not measured

ATTACHMENT A
AGENCY CORRESPONDENCE

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

Terry Tamminen
Secretary for Environmental Protection

California Regional Water Quality Control Board

San Francisco Bay Region

Arnold Schwarzenegger
Governor

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
http://www.swrcb.ca.gov/rwqcb2

October 4, 2004
File No. 07-0764 (BGS)

7-Eleven, Inc.
Attn: Mr. Bob DeNinno
10220 S.W. Greenburg Road, Suite 470
Portland, Oregon 97233

OCT 0 8 2004
BY:

SUBJECT: **Approval of Work Plan for Remediation Well Installation and Oxygen Injection Feasibility Test – 7-Eleven Store No. 20244, 3625 MacDonald Avenue, Richmond, Contra Costa County**

Dear Mr. DeNinno:

Board staff have reviewed the *Work Plan for Remediation Well Installation and Oxygen Injection Feasibility Test*, dated September 14, 2004, prepared by Secor International Inc. The work plan proposes installation of three oxygen injection test wells, and conducting an oxygen injection test to evaluate the effectiveness of oxygen injection for enhancing in-situ biodegradation of the residual hydrocarbons in soil and groundwater at the subject site. The proposed scope of work is hereby approved.

The report presenting the well installation and oxygen injection test activities is due in this office by January 4, 2005. You should be aware that this is a formal request for a technical report pursuant to California Water Code 13267. Failure to respond or a late response to this request may subject you to civil liability imposed by the Board to a maximum amount of $1,000 per day. Any extension of the time deadlines set forth above must be confirmed in writing by Board staff.

Please include an electronic copy of the site investigation proposal in "pdf" electronic format or comparable. All documents submitted should have the Regional Board file number 07-0764 on the first page of the report. A copy of any submittal should also be sent to the CCCHSD in Martinez. Please direct all questions and correspondence regarding this matter to Barbara Sieminski (tel: 510-622-2423) or e-mail bgs@rb2.swrcb.ca.gov.

Sincerely,

for Bruce H. Wolfe
Executive Officer

cc:
Mr. Paul Andrews
CCCHSD
4333 Pacheco Blvd.
Martinez, CA 94553

Mr. Daniel Davis
Secor International Inc.
3017 Kilgore Rd, Ste 100
Rancho Cordova, CA 95670

ATTACHMENT B
WELL PERMITS

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

20244

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
FAX (925) 646-5168
www.cocoeh.org

FACSIMILE TRANSMITTAL COVER SHEET

DATE: 10-27-04

TO: ATTN SCOTT GRAHAM SECOR INT'L

FROM: MICHAEL

FAX#: 916-861-0430

OF PAGES: 4 (INCLUDING COVER SHEET)

RE: APPROVED PERMIT(S)

☐ PRIORITY ☒ ROUTINE ☐ FOR REVIEW

COMMENTS:

FAX REQUEST FOR INSPECTION APPOINTMENT TO 925-646-5888

If you have any problems with receipt of transmittal, please call (925) 646-5225

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocoeh.org

Well Permit

WP0003207

PR Number: 21079 PE Number: 4369

Date Received: 22 OCT 04 Permit Number: 04-2071

Permit Approved/Issued by: _____ Date Issued: 10 27 04

Environmental Health Specialist

NEW WELL 12	( ) SOIL BORINGS	WELL ABANDONMENT	REPAIR

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 3525 MACDONALD AVE, RICHMOND

APN: 516-202-020 Lot/Parcel #:

Subdivision #: Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING Contact Person: CHRIS PRUNER

Phone #: 925-313-5800 FAX#: 925-313-0302

Consultant: SECOR INTERNATIONAL Contact Person:

Phone #: 916-861-0400 FAX#: 916 861 0430

LEGAL OWNER INFORMATION

Legal Owner Name: 7-ELEVEN INC

Owner Address: 2711 N HASKELL AVE

City/State/Zip: DALLAS, TX 75204

Phone #: 214-841-6592 Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. *Voice mail messages are not acceptable.* The appointment desk sends confirmation via telephone or fax.

Well drillers must posses a valid C-57 license and must have on file a performance bond of $5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____ Date: _____

(08/02)

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocoeh.org

Well Permit

WP0003208

PR Number: 21080 PE Number: 4369

Date Received: 22 OCT 04 Permit Number: 04-2072

Permit Approved/Issued by: _____ Date Issued: 10-27-04

Environmental Health Specialist

NEW WELL (1)	( ) SOIL BORINGS	WELL ABANDONMENT	REPAIR

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 3525 MACDONALD AVE, RICHMOND

APN: 516-202-020 Lot/Parcel #:

Subdivision #: Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING Contact Person: CHRIS PRUNER

Phone #: 925-313-5800 FAX#: 925-313-0302

Consultant: SECOR INTERNATIONAL Contact Person:

Phone #: 916-861-0400 FAX#:

LEGAL OWNER INFORMATION

Legal Owner Name: 7-ELEVEN INC

Owner Address: 2711 N HASKELL AVE

City/State/Zip: DALLAS, TX 75204

Phone #: 214-841-6592 Alternate Phone #:

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1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____ Date: _____

(08/02)

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cccoeh.org

Well Permit

WP0003209

PR Number: 21081 PE Number: 4369

Date Received: 22 OCT 04 Permit Number: 04-2073

Permit Approved/Issued by: _____ Date Issued: 10-27-04

Environmental Health Specialist

NEW WELL ☒	( ) SOIL BORINGS	WELL ABANDONMENT	REPAIR

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 3525 MACDONALD AVE, RICHMOND

APN: 516-202-020 Lot/Parcel #:

Subdivision #: Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING Contact Person: CHRIS PRUNER

Phone #: 925-313-5800 FAX#: 925-313-0302

Consultant: SECOR INTERNATIONAL Contact Person:

Phone #: 916-861-0400 FAX#:

LEGAL OWNER INFORMATION

Legal Owner Name: 7-ELEVEN INC

Owner Address: 2711 N HASKELL AVE

City/State/Zip: DALLAS, TX 75204

Phone #: 214-841-6592 Alternate Phone #:

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WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____ Date: _____

(06/02)

ATTACHMENT C
FIELD NOTES

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	2/8/05
	Richmond, CA	DATE PREPARED:	2/7/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

SITE VISITATION REPORT

Name(s) JDR Date: 2/8/05 Did you call in? Yes No

Arrival Time: 1130 Departure Time: 1530 Who did you call? TM

Weather Notations: SUN CLOUDY RAIN SNOW Temperature 55° F

DRUM INVENTORY

	WATER		CARBON	TOTAL OPEN TOP	Ø
	SOIL		EMPTY	TOTAL BUNG TOP	Ø

HEALTH AND SAFETY ASSESSMENT

HASP
PPE
O_2 FLAME
TRIPS
TRAFFIC

INSTRUMENT CALIBRATION NOTES

Instrument Type UV 550 A

Instrument Calibration Method and Results

Calibration Readings Pre Injection: 10.68 Post Injection: 10.32

Agitated Water Readings: Pre Injection: 10.59 Post Injection: 10.30

Instrument Type QRAE +

Instrument Calibration Method and Results AIR - 20.9% O_2

Instrument Type SOLINST

Instrument Calibration Method and Results WTR

Instrument Type

Instrument Calibration Method and Results

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	2/8/05
	Richmond, CA	DATE PREPARED:	2/7/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

Field Work Conducted By: JDR Date: 2/8/05

1130 ADV ONSITE AND CHK W/ 7-11 AND CALL TM. SAFETY:
HASP - FOR EMERG. PROC.
PPE - GLVS, GLSSS, VEST, HAT, KN-PDS
TRIPS - BE AWARE.
TRAFFIC - TAPE OFF TRUCK + WELLS, USE TRUCK AS TRAFFIC BARRACADE.
O2 FLAME - NO SMOKING SIGNS, WIND DIR.?!

PRE CAL DO = 10.68 POST CAL DO = 10.32
WTR AG = 10.59 WTR AG = 10.30

TAKE RDGS - USE TRUCK IN TRAFFIC CONTROL @ STREET AND PARKING LOTS.

1300 STARTED O2 INJ @ I-1,2,3.
I-1,2 FOR 60 MIN. @ 35 PSI.
I-3 FOR 50 MIN. @ 35 PSI. AFTER REGROUTING THE WELL BASE 2WKS PRIOR, THERE STILL IS A SLIGHT AIR LEAK AROUND THE CSG.

1430 TAKE POST DO'S @ ALL MW'S

1530 DEPART SITE

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	2/8/05
	Richmond, CA	DATE PREPARED:	2/7/05
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

WORK REQUEST FORM

WELL I.D.	DTB ft bgs	WELL DIAM.	DTW ft TOC	D.O. Before Injection (mg/L)	D.O. Before Injection time	D.O. After Injection (mg/L)	D.O. After Injection time	COMMENTS
MW-1	25.0	2"	11.40	2.60	1225	3.90	1450	
MW-2	25.0	2"	11.20	3.40	1235	4.40	1440	
MW-3	25.0	2"	10.00	8.00	1245	17.60	1430	
MW-4	25.0	2"	11.90	3.00	1145	3.00	1515	
MW-5	25.0	2"	11.20	2.20	1210	2.20	1530	
I-1	27.0	3/4"	SEALED			WELLS		
I-2	27.0	3/4"						
I-3	27.0	3/4"						

10.68 / 1032
10.59 / 1030

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	2/8/05
	Richmond, CA	DATE PREPARED:	2/7/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

Oxygen Injection Monitoring Summary

Injection Well	Time			O2 Injection Pressure (PSI)	O2 Injection Volume (cubicFeet)	O2 Injection Rate (cfm)	Adjacent Monitoring Point	O2 Reading Vadose		NOTES
	Start	Finished	Elapsed					(% LEL)	Time.	
I-1, 2, 3										
–	–	–	–		–	–	MW-1	18.6	1225	Pre-injection Readings
–	–	–	–		–	–	MW-2	18.4	1235	Pre-injection Readings
							Mw-3	19.1	1245	Pre-injection Readings
I-1, 2	1300	1400	60	35	150 EA	2.5	MW-1	18.6	1225	
							MW-1	18.0	1310	
I-3	1300	1350	50	35	150	3.0	MW-1	17.2	1330	
							MW-2	18.4	1235	
							MW-2	17.9	1315	
							MW-2	16.8	1340	
							MW-3	19.1	1245	
							MW-3	11.4	1320	
							MW-3	9.3	1345	

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/25/05 + 1/26/05
	Richmond, CA	DATE PREPARED:	1/21/2005
PREPARED FOR:	SDR	PREPARED BY:	Tom Miller

SITE VISITATION REPORT

Name(s) SDR Date: 1/25 + 1/26/05 Did you call In? Yes No

Arrival Time: 0800 / 0800 Departure Time: 1300 / Who did you call? TM

Weather Notations: SUN CLOUDY RAIN SNOW Temperature 38° F

DRUM INVENTORY

	WATER		CARBON	TOTAL OPEN TOP	Ø
	SOIL		EMPTY	TOTAL BUNG TOP	Ø

HEALTH AND SAFETY ASSESSMENT

HASP
TRAFFIC
TRIPS
O_2 FLAME
PPE

INSTRUMENT CALIBRATION NOTES

Instrument Type YSI 550A

Instrument Calibration Method and Results

Calibration Readings Pre Injection: 11.14 / 10.76 Post Injection: 10.80 / 10.51

Agitated Water Readings: Pre Injection: 11.68 / 10.90 Post Injection: 10.72 / 10.44

Instrument Type QRAE+

Instrument Calibration Method and Results AIR = 20.9% O_2

Instrument Type DRINSI

Instrument Calibration Method and Results WTR

Instrument Type

Instrument Calibration Method and Results

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/25 + 1/26/02
	Richmond, CA	DATE PREPARED:	1/21/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

Field Work Conducted By: JDR Date: 1/25/05 (TUE. MORN.)

0800 ARV ONSITE TALK W/RANDAL (MNGR) + TM. SAFETY:
HASP - FOR EMERG. PROC.
O_2 FLAME - POST NO SMOKING SIGNS, MONITOR O_2 + WIND
PPE - GLASS, GLVS, VEST, KN - PDS
TRAFFIC - TAPE + CONE OFF TRUCK + WELLS, LOCK TRUCK
TRIPS - BY ALERT.
ALWAYS USE TRUCK AS TRAFFIC CONTROL ON STREETS + PKG
PRE CAL DO= , AG. WTR= / POST CAL DO= , AG WTR=
TAKE WELL RDGS ON + OFF SITE IN STREETS.
0930 AS PER REQ. FOR O_2 MIGRATION (BY D.D) START O_2 INJ @ I-1 FOR 30 MIN @ 30 PSI. NOTICED THAT THE BOTTLE PRESSURE HADNT DROPPED FROM 1500 PSI (2200 PSI STARTING) UPPED THE INJ. PRESS. 30 TO 40 PSI FOR ANOTHER 30 MIN.
*MW-3 TOOK A VERY SLIGHT AMOUNT OF FLOW INCREASE BY VERY SLIGHTLY INFLATING THE CAPPED (MW-3) WELL WITH A PLASTIC BAG SEALED AROUND THE TOP OF THE CSG W/A RUBBER BAND.
1030 O_2 INJ. STARTED TO I-3 FOR 35 PSI FOR 60 MIN.
*MW-3 INCREASED QUITE A BIT, INFLATING THE BAG ALMOST FULL. THE WELL STILL HAS SOME O_2 LEAKING AROUND THE WELL CSG.
1130 O_2 INJ. STARTED TO I-2 FOR 35 PSI FOR 60 MIN.
*NO NOTICABLE INFLATION @ THE MW-3 PLASTIC BAG OVER THE WELL.

1300 POST DO'S TAKEN @ MW-1,2,3 AS PER REQ. THEN DPT SITE.

JDR 1/26/05 (WED. MORN)

0800 ARV ONSITE AND TALK W/RANDAL AND TM. SAFETY: (LISTED ABOVE)
PRE CAL DO= , AG WTR= / POST CAL DO= , AG. WTR=
TAKE POST DO'S @ MW-1, 2, 3, 4, 5 ON + OFF SITE.
*1000 GROUT IN I-3 WELL BOX OUTSIDE OF EXISTING GROUT TO TRY AND SEAL O_2 INJ.!
1030 DPT SITE.

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/25/05 + 1/26/05
	Richmond, CA	DATE PREPARED:	1/21/05
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

WORK REQUEST FORM

WELL I.D	DTB ft bgs	WELL DIAM	DTW ft TOC	PRE DO Before Injection (mg/L)	PRE DO Before Injection Time	POST DO After Injection (mg/L)	POST DO After Injection Time	COMMENTS 1/25/05 - 1/26/05
MW-1	25.0	2"	10.70	2.50	0900	3.80	1255	3.70 - 0900
MW-2	25.0	2"	10.50	3.00	0910	4.20	1245	4.40 - 0910
~~MW-2~~ MW-3	25.0	2"	10.60	4.10	0920	8.20	1235	7.80 - 0920
MW-4	25.0	2"	12.40	3.00	0845	NOT TAKEN		3.80 - 0845
MW-5	25.0	2"	11.60	2.40	0820	NOT TAKEN		2.80 - 0820
I-1	27.0	3/4"						SEALED WELLS
I-2	27.0	3/4"						
I-3	27.0	3/4"						

1/26/05

PRE CAL DO = 11.14 / 10.76 = POST CAL DO

H_2O AG = 11.68 / 10.90 = H_2O AG

1/27/05

PRE CAL DO = 10.88 / 10.51 = POST CAL DO

H_2O AG 10.72 / 10.44 = H_2O AG

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/25/05 [redacted]
	Richmond, CA	DATE PREPARED:	1/21/2005
PREPARED FOR:	JOR	PREPARED BY:	Tom Miller

Oxygen Injection Monitoring Summary

Injection Well	Time Start	Time Finished	Time Elapsed	O2 Injection Pressure (psi)	O2 Injection Volume (cubic Feet)	O2 Injection Rate (cfm)	Adjacent Monitoring Point	O2 Reading Vadose (%LEL)	O2 Reading Vadose Time	NOTES
I-1, 2, 3										
–	–	–	–		–	–	MW-1	18.9	0900	Pre-injection Readings
–	–	–	–		–	–	MW-2	18.7	0910	Pre-injection Readings
							Mw-3	19.4	0920	Pre-injection Readings
I-1	0930	1030	60	30-40	150	2.5	MW-1	18.9	0900	
							MW-1	18.3	0940	
I-2	1130	1230	60	35	150	2.5	MW-1	17.5	1255	
I-3	1030	1130	60	35	150	2.5	MW-2	18.7	0910	
							MW-2	18.2	0950	
							MW-2	17.0	1245	
							MW-3	19.4	0920	
							MW-3	11.7	1000	
							MW-3	9.6	1120	
							MW-3	8.7	1235	

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/11/2005 + 1/12/05
	Richmond, CA	DATE PREPARED:	1/7/2005
PREPARED FOR:	SOR	PREPARED BY:	Tom Miller

SITE VISITATION REPORT

Name(s) JDR Date: 1/11/05 Did you call in? Yes No

Arrival Time: 0800/0800 "Departure Time: 1300/1300 Who did you call? TM

Weather Notations: SUN RAIN SNOW Temperature 48 F

DRUM INVENTORY

	WATER		CARBON	TOTAL OPEN TOP	Ø
	SOIL		EMPTY	TOTAL BUNG TOP	

HEALTH AND SAFETY ASSESSMENT

HASP
TRAFFIC
TRIP3
PPE
O2 FLAME

INSTRUMENT CALIBRATION NOTES

Instrument Type YSI 550A

Instrument Calibration Method and Results

Calibration Readings Pre Injection: 10.53/10.68 Post Injection: 9.70/9.89

Agitated Water Readings: Pre Injection: 10.50/10.47 Post Injection: 9.61/9.80

Instrument Type QRAE+

Instrument Calibration Method and Results AIR = 20.9% O_2

Instrument Type SOLINST

Instrument Calibration Method and Results WER

Instrument Type

Instrument Calibration Method and Results

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/11/2005 + 1/12/05
	Richmond, CA	DATE PREPARED:	1/7/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

Field Work Conducted By: JDR Date: 1/11/05 (TUES)

0800 ARV ONSITE CALL TM AND GENE IN 7-11. SAFETY:
HASP - FOR EMERG. PROC.
PPE - RAINGEAR, GLVS, GLSSS, KN-PDS
TRAFFIC - USE TRUCK AS A BARRACADE AND
TAPE OFF WORK AREAS. BLOCK STREET THEN DRIVING
TRIPS - BE CAUTIOUS IN RAIN.
O_2 FLAME - NO SMOKING SIGNS, MONITOR
* CUT 3/4" WELL HDS AND GLUED FEMALE ADPT. FOR INJ. @ I 1-3.
PRE CAL DO = 10.53 AG = 10.50 / POST CAL DO = 9.70 AG = 9.61
TAKE RDGS IN THE STREETS FOR MW-4,5 THEN ONSITE.
→ THEN IN THE ORDER REQUESTED, ONE BY ONE BY DAN DAVIS:
0930 O_2 INJ INTO I-1 FOR 60 MIN @ 30 PSI. VERY SLIGHT O_2
MIGRATION TO MW-3. GLOVE INFLATION @ MW-3 VERY
SLIGHT BUT NOTICABLE.
1030 O_2 INJ INTO I-3 FOR 45 MIN @ 30 PSI. FASTER O_2
MIGRATION TO MW-3. O_2 BUBBLING UP THRU THE
WELL BOX FLOOR @ 30 AND 20 PSI. TBG UNSCREWED
DWN HOLE 1/1 GLOVE INFLATION @ MW-3 THE MOST, INFLATED
2 FULL FINGERS.
1130 O_2 INJ INTO I-2 FOR 60 MIN. @ 30 PSI. O_2 MIGRATION TO
MW-3 SLOWED AND IS THE LEAST OF THE 3 INJ.
WELLS. GLOVE INFLATION @ MW-3 NEGLAGABLE.

POST DO RDG @ JUST MW1-3 AS PER REQUESTED.

1300 DPT SITE

1/12/05

0800 ARV ONSITE CALL TM AND 7-11 AND SAFETY AS ABOVE LISTED.
PRE CAL DO = 10.68 AG = 10.47. POST CAL DO = 9.89 AG = 9.80
TRAFFIC VERY PROHIBITIVE FOR WELL MONITORING, USE TRUCK AS BARRACADE
TAKE POST DO RDGS @ MW-1,2,3,4. * MW-3 DO DROPPED THE
NXT DAY LIKE IT GOT CARRIED AWAY BY UNDERGRND WTR FLOW?
1000 DPT SITE

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/11/05 + 1/12/05
	Richmond, CA	DATE PREPARED:	1/7/05
PREPARED FOR:	SDR	PREPARED BY:	Tom Miller

WORK REQUEST FORM

WELL I.D.	DTB	WELL DIAM.	DTW	D.O. Before Injection		D.O. After Injection		COMMENTS
	ft bgs		ft TOC	(mg/L)	time	(mg/L)	time	POST DO NAT DAY 1/12/05 TIME
MW-1	25.0	2"	9.10	2.40	0900	3.80	1245	4.20 - 0900 19.2/18.6/17.8
MW-2	25.0	2"	8.70	2.70	0910	3.70	1255	3.90 - 0910 19.0/18.5/17.3
MW-3	25.0	2"	9.20	2.50	0920	7.00	1235	2.00 - 0920 19.7/20.1/19.9
MW-4	25.0	2"	12.60	3.60	0815	—	—	4.20 - 0840
MW-5	25.0	2"	10.20	2.40	0840	—	—	2.60 - 0815
I-1	27.0	3/4"						SWELLED
I-2	27.0	3/4"						
I-3	27.0	3/4"						

c/o DO MTR TIP W/NEW SOLUTION ALSO.

PRE CAL DO = 10.53 / 9.70 10.68 / 9.89

AG = 10.50 / 9.61 10.47 / 9.80

I-1 SLOW PUSH TO MW-3.

I-3 AIR LKS OUT IN THE WHD CEMENT / WELLBOX FLOOR

I-3 FASTER PUSH TO MW-3.

I-2 SLOWEST PUSH TO MW-3

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.05.1006
SITE ADDRESS:	3625 MacDonald Ave.	START DATE:	1/11/05
	Richmond, CA	DATE PREPARED:	1/7/2005
PREPARED FOR:	JDR	PREPARED BY:	Tom Miller

Oxygen Injection Monitoring Summary

Injection Well	Time Start	Time Finished	Time Elapsed	O2 Injection Pressure (psi)	O2 Injection Volume (cubic Feet)	O2 Injection Rate (cfm)	Adjacent Monitoring Point	O2 Reading Vadose (%LEL)	O2 Reading Vadose Time	NOTES
I-1,2,3										
–	–	–	–		–	–	MW-1	19.2	0900	Pre-injection Readings
–	–	–	–		–	–	MW-2	19.0	0910	Pre-injection Readings
							Mw-3	19.7	0920	Pre-injection Readings
I-1	0930	1030	60	30	150	2.5	MW-1	19.2	0900	
							MW-1	18.5	0945	
I-2	1130	1230	60	30	150	2.5	MW-1	17.8	1045	
I-3	1030	1115	45	30-25	150	3.3	MW-2	19.0	0910	
							MW-2	18.5	0955	
							MW-2	17.3	1055	
							MW-3	19.7	0920	
							MW-3	12.0	1015	
							MW-3	9.9	1105	
							MW-3	9.0	1155	

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.04.0603
SITE ADDRESS:	3625 MacDonald Avenue	START DATE:	12/14/2004
	Richmond, CA	DATE PREPARED:	12/13/2004
PREPARED FOR:		PREPARED BY:	Danielle Catlin-Wright

SITE VISITATION REPORT

Name(s) Danielle CATLIN-WRIGHT Date: 12.14.04 Did you call in? Yes No

Arrival Time: 7:45 "Departure Time: _____ Who did you call? Daniel DAVIS

Weather Notations: SUN CLOUDY RAIN SNOW Temperature 50 F

DRUM INVENTORY (No GAS @ this location)

1	Purged GW WATER		CARBON	TOTAL OPEN TOP	7
THH 11	SOIL		EMPTY	TOTAL BUNG TOP	1

HEALTH AND SAFETY ASSESSMENT

Site has no gasoline (removed) & is located in a low income mixed use (Commerical/Residential) neighborhood. Bus Stop on MACDONALD - Must have exclusion zone

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES

Arrive onsite @ 7:45AM, Gregg drilling all ready onsite (start time set for 8AM) Greet DON & Lu & discuss set up & objective. Measure MW-1 → 12.15' DTW
Set up in I-3 & close off approach. Set up exclusion zone. 8:20 H&S meeting. Call County to confirm Grout inspection for this afternoon. leave message for Michael S. HAND Auger I-3 & begin drilling @ 8:55, collect last soil sample I-3-25' @ 10:10 AM. Call Daniel Davis, discuss lithology & proceed drilling to 27' where the ~~[illegible]~~ oxygen injection well was to be constructed.
10:30 Call Michael S. w/ County & leave a second message.
11:25 - Am connected w/ Michael S.' supervisor. Michael is out sick & the County is short staffed. No grout inspector will be presented today to witness the grouting of I-1 thru I-3. We (SECOR/Gregg) have approval to grout w/out the county to witness.
Construct I-3. Move to I-2 & begin hand augering. Clean up & pull supplies from support truck.

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.04.0603
SITE ADDRESS:	3625 MacDonald Avenue	START DATE:	12/14/2004
	Richmond, CA	DATE PREPARED:	12/13/2004
PREPARED FOR:	DEC	PREPARED BY:	Danielle Catlin-Wright

DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)

Field Work Conducted By: DEC Date: 12.14.04

Grab short lunch, followed by looking for a public Restroom.
→ Note: For future site work bRING a PoRT-o-Potty.
7-11, Churches Chicken & Citibank Do NoT have a public restroom).

- HANDAuger I-2 location Begin drilling w/ soil samples every 5'.
- Collect 1st soil sample @ 1:20pm @ (I-2) 10' bgs.
Discuss lithology & well constructions w/ Daniel Davis (D.D.)
Drill to 25' bgs & decide to proceed to 27' as per discussion w/ D.D & similar lithology.
Construct I-2 identical to I-3. @ w/ TD = 27'
0.75 Blank casing, (1) 26" Diffused gas Technology ceramic-Steel
→ diffuser tip. SAND from 27 → 24' bgs, Bentonite from 24'-23'.
Well Completed by 3:20 pm Begin set up to Grout
~~Decide~~ Mix & grout ~~MW~~ I-3 & I-2.
Clean up around cookie cuts, move drums & Begin repacking Materials.
- Told by 7-11 store personnel Not to be here after dark.
- Note: ONLY two overhead lites on property - neither ~~at~~ placed so we may drill & Complete I-1.
- Contact Gregg Drilling & Jaff Auchterlonie @ the office.
- To Return Wed. 12.15.04 in the AM (7:30) to drill & Complete the final O_2 well.
- Set Well Boxes.

JOB NAME:	7-Eleven Store #20244	JOB NUMBER:	77EL.20244.04.0603
SITE ADDRESS:	3625 MacDonald Avenue	START DATE:	12/14/2004 , Today = 12-15-04
	Richmond, CA	DATE PREPARED:	12/13/2004
PREPARED FOR:	DEC	PREPARED BY:	Danielle Catlin-Wright

Arrive onsite 7:20AM
Purchase ice & check well Boxes from yesterday. Not damaged!
Concrete around I-3 & I-2 ~~are not~~ isn't dry yet.
- Begin setting up exclusion zone.
7:50 - Don & Trevor (Gregg Drilling) arrive H&S → 8:10 AM
Set up ON I-1.
Call Contra Costa County & est. Noon Grout. Michael to call if he cannot make the appt.
HAND AUGER to 5' → Begin drilling @ 8:50AM
- collect soil samples every 5' (Beginning at 10' → 20 → 25')
Continuous Lithology from 10 → 25'.
Collected last soil sample @ 9:50
Called Michael left message again to say we'd need an earlier grout.
Build I-1 (SAND to 24, Bent. to 23'), (Wait to hear from County)
→ Receive call from Michael that he will not be able to make our grout inspection & we may proceed w/out him.
- Grout I-1.
- Set well Box, clean up site, add some grout to I-3.
- Reload trucks
- Finalize Paperwork
- leave site @ 12:30

ATTACHMENT D
BORING AND WELL CONSTRUCTION LOGS

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/15/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-1

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		∇ 18 ' First Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
12" Dameter Traffic Rated Well Box			Asphalt at grade. 4" thick			
			Clay (CL): Brown (10YR 4/3), low plasticity, high toughness, damp, very stiff, no HC odor (0,5,15,80)			
Grout	5		**Clay (CL):** Brown (10YR 4/3), low plasticity, high toughness, damp, very stiff, no HC odor (0,10,15,75)	0.0		
3/4" Schedule 80 PVC	10		**Sandy Silt (ML):** Olive Brown (2.5YR 4/3), fine grain sand, highly plastic, low toughness, damp, firm, no HC odor (0,30,70,0)	1.1	I-1-10'	0905
			Clay (CL): Olive Brown (2.5Y 4/4), low plasticity, high toughness, damp, very stiff			
	15		**Sandy Silt (ML):** Yellowish Brown (10YR 5/4), fine grain sand, highly plastic, low toughness, moist, firm, no HC (0,30,70,0)		I-1-15'	0915
∇	20		**Silt with Sand (ML):** Yellowish Brown (10YR 5/4), fine grain sand, highly plastic, low toughness, wet, soft, no HC odor (0,25,75,0)	20.0	1-1-20'	0930
Bentonite			**Silty Sand (SM):** Dark Yellow Brown (10YR 4/4), fine grain, poorly graded, rounded, low plasticity, wet, medium density, no cement, no HC odor (0,60,40,0)			
			Silt (ML): Brown (10YR 4/3), fine grain sand, highly plastic, low			

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

(sheet 1 of 2)

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/15/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-1

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		∇ 18 ' First Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
#3 Sand 2.5 Foot DiffuserTip			toughness, wet, firm, no HC odor, (0,10,90,0)	1.5	I-1-25'	0950
			Silty Sand (SM): Dark Yellow Brown (10YR 4/4), fine grain, poorly graded, rounded, low plasticity, wet, medium density, no cement, no HC odor (0,60,40,0)			
			Silty Sand (SM): Brown (7.5 YR 4/3), fine grain, poorly graded, rounded, low plasticity, wet, medium density, no cement, no HC odor, (0,80,20,0)			
	30		**Silty Sand (SM):** Dark Yellowish Brown (10YR 4/4), fine grain, poorly graded, rounded, low plasticity, wet, medium density, no cementation, no HC odor, (0,60,40,0)			
			Silt (ML): Yellowish Brown (10YR 5/4), fine grain sand, highly plastic, low toughness, wet, soft, no HC odor, (0,20,80,0)			
	35					
	40					
	45					

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

(sheet 2 of 2)

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/14/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-2

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		∇ 17 ' First Water ▼ 12.13 ' Static Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
12" Dameter Traffic Rated Well Box			Asphalt at grade. 4" thick			
			Clay (CL): Mottled Brown (10YR 4/3) and Dark Grey (10YR 4/1), fine grain, low plasticity, high toughness, damp, very stiff, no HC odor (0,5,15,80)			
Grout	5		**Clay (CL):** Mottled Brown (10YR 4/3) and Dark Grey (10YR 4/1), fine grain, low plasticity, high toughness, damp, very stiff, no HC odor (0,10,15,75)	0.0		
	10		**Clay (CL):** Mottled Brown (10YR 3/2) and Dark Grey (10YR 4/1), fine grain, low plasticity, high toughness, damp, very stiff, no HC odor (0,10,15,75)	13	I-2-10'	1320
3/4" Schedule 80 PVC			**Silty Sand (SM):** Very Dark Grayish Brown, fine to coarse grain sand, well graded, rounded, high plasticity, moist, medium dense, no cement, no HC odor, (10,60,30,0)			
	15		**Sandy Silt (ML):** Olive Brown (2.5Y 4/3) fine grain sand, highly plastic, medium toughness, moist, firm, slight HC odor (0,30,70,0)	98	I-2-15'	1330
	20		**Silt with Sand (ML):** Yellowish Brown (10YR 5/4) fine grain sand, highly plastic, low toughness, saturated, soft, no HC odor (0,25,75,0)	5.9	I-2-20'	1335
Bentonite			**Clay with Sand (CL):** Yellowish Brown (10YR 5/4) fine grain sand, low plasticity, high toughness, wet, stiff, no HC odor	2.5	I-2-25'	1345

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

(sheet 1 of 2)

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/14/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-2

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		▽ 17 ' First Water ▼ 12.13 ' Static Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
#3 Sand 2.5 Foot DiffuserTip			(0,20,0,80) **Silty Sand (SM):** Dark Yellowish Brown (10YR 4/4) fine grain, poorly graded, rounded, wet, medium dense, no cement, no HC odor (0,60,40,0)			
	30					
	35					
	40					
	45					

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

(sheet 2 of 2)

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/14/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-3

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		▽ 17 ' First Water ▼ 17.92 ' Static Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
12" Dameter Traffic Rated Well Box			Asphalt at grade. 4" thick			
			Clay (CL): Mottled Brown (10YR 4/3) and Dark Grey (10YR 4/1), low plasticity, high toughness, damp, very stiff, no HC odor (0,5,15,80)			
Grout	5		**Clay (CL):** Mottled Brown (10YR 4/3) and Dark Grey (10YR 4/1), low plasticity, high toughness, damp, very stiff, no HC odor (0,10,15,75)	0.0		
3/4" Schedule 80 PVC	10		**Silt with Sand (ML):** Olive Brown (2.5 Y 4/3) fine grain sand, highly plastic, low toughness, moist, firm, no HC odor (0,25,55,20)	5.4	I-3-10'	0915
			Clay with Sand (CL): Olive Brown (2.5 Y 4/4) low plasticity, high toughness, damp, very stiff, slight HC odor (10,15,0,75)			
	15		**Sandy Silt with Gravel (ML):** Olive Brown (2.5Y 4/3) fine grain sand, highly plastic, medium toughness, moist, firm, slight HC odor (20,20,60,0)	128	I-3-15'	0930
▽ ▼			**Sandy Silt (ML):** Yellowish Brown (10YR 5/4) fine grain sand, highly plastic, medium toughness, moist, firm, slight HC odor (0,30,70,0)			
	20		**Silt with Sand (ML):** Yellowish Brown (10YR 5/4) fine grain sand, highly plastic, low toughness, saturated, soft, no HC odor (0,25,75,0)	2.2	I-3-20'	0950
			Clay with Sand (CL): Yellowish Brown (10YR 5/4) fine grain sand, low plasticity, high toughness, wet, stiff, no HC odor (0,25,75,0)			
Bentonite			**Silty Sand (SM):** Dark Yellowish Brown (10YR 4/4) fine grain, poorly graded, rounded, wet, medium density, no cementation, no HC odor (0,60,40,0)			

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Well Number:
D.C.	12/14/04	Gregg Drilling	7-11 #20244 Well Install Richmond, California	Hollow Stem Auger Split Spoon	I-3

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		▽ 17 ' First Water ▼ 17.92 ' Static Water	27.0	140	30

Well Construction	Depth, (ft.)	Sample Type	Description	PID/FID (ppm)	Sample Name	Time
#3 Sand 2.5 Foot DiffuserTip				1.7	I-3-25'	1010
			Silt with Sand (ML): Yellowish Brown (10YR 5/4) fine grain sand, highly plastic, low toughness, wet, firm, no HC odor (0,20,80,0)			
	30					
	35					
	40					
	45					

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77EL.20244.05.0603** Date **12/15/04**

Log of Well

MW8-10D.GPJ
LOG OF BOREHOLE

Figure

(sheet 2 of 2)

ATTACHMENT E
CERTIFIED LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

KIFF ANALYTICAL LLC

Report Number : 41529
Date : 12/21/2004

Danielle Catlin-Wright
SECOR International, Inc.
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670

Subject : 8 Soil Samples
Project Name : 7-Eleven Store #20244
Project Number : 77EL.20244.04

Dear Ms. Catlin-Wright,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 41529

Date : 12/21/2004

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Sample : **I-3-15** Matrix : Soil Lab Number : 41529-02

Sample Date :12/14/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1.8**	0.25	mg/Kg	EPA 8260B	12/19/2004
Toluene	**0.88**	0.25	mg/Kg	EPA 8260B	12/19/2004
Ethylbenzene	**36**	0.25	mg/Kg	EPA 8260B	12/19/2004
Total Xylenes	**85**	0.25	mg/Kg	EPA 8260B	12/19/2004
Methyl-t-butyl ether (MTBE)	**6.6**	0.25	mg/Kg	EPA 8260B	12/19/2004
TPH as Gasoline	**1400**	25	mg/Kg	EPA 8260B	12/21/2004
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	12/19/2004
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	12/19/2004

Sample : **I-3-20'** Matrix : Soil Lab Number : 41529-03

Sample Date :12/14/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Methyl-t-butyl ether (MTBE)	**1.3**	0.0050	mg/Kg	EPA 8260B	12/19/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/19/2004
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	12/19/2004
4-Bromofluorobenzene (Surr)	88.4		% Recovery	EPA 8260B	12/19/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 41529
Date : 12/21/2004

Project Name : **7-Eleven Store #20244**
Project Number : **77EL.20244.04**

Sample : **I-3-25'** Matrix : Soil Lab Number : 41529-04
Sample Date :12/14/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	**0.43**	0.0050	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	91.3		% Recovery	EPA 8260B	12/18/2004

Sample : **I-2-15'** Matrix : Soil Lab Number : 41529-06
Sample Date :12/14/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.22**	0.025	mg/Kg	EPA 8260B	12/18/2004
Toluene	**< 0.025**	0.025	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	**3.1**	0.025	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	**0.46**	0.025	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	**3.5**	0.025	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	**110**	5.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	12/18/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 41529
Date : 12/21/2004

Project Name : **7-Eleven Store #20244**
Project Number : **77EL.20244.04**

Sample : **I-2-20'** Matrix : Soil Lab Number : 41529-07
Sample Date :12/14/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/19/2004
Methyl-t-butyl ether (MTBE)	**1.5**	0.0050	mg/Kg	EPA 8260B	12/19/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/19/2004
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	12/19/2004
4-Bromofluorobenzene (Surr)	89.3		% Recovery	EPA 8260B	12/19/2004

Sample : **I-1-15'** Matrix : Soil Lab Number : 41529-10
Sample Date :12/15/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/21/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/21/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/21/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/21/2004
Methyl-t-butyl ether (MTBE)	**0.16**	0.0050	mg/Kg	EPA 8260B	12/21/2004
TPH as Gasoline	**1.3**	1.0	mg/Kg	EPA 8260B	12/21/2004
Toluene - d8 (Surr)	111		% Recovery	EPA 8260B	12/21/2004
4-Bromofluorobenzene (Surr)	92.3		% Recovery	EPA 8260B	12/21/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 41529
Date : 12/21/2004

Project Name : **7-Eleven Store #20244**
Project Number : **77EL.20244.04**

Sample : **I-1-20'** Matrix : Soil Lab Number : 41529-11
Sample Date :12/15/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	**0.30**	0.0050	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	95.6		% Recovery	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	90.7		% Recovery	EPA 8260B	12/18/2004

Sample : **I-1-25'** Matrix : Soil Lab Number : 41529-12
Sample Date :12/15/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/17/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/17/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/17/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/17/2004
Methyl-t-butyl ether (MTBE)	**0.50**	0.0050	mg/Kg	EPA 8260B	12/17/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/17/2004
Toluene - d8 (Surr)	98.0		% Recovery	EPA 8260B	12/17/2004
4-Bromofluorobenzene (Surr)	89.9		% Recovery	EPA 8260B	12/17/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41529

Date : 12/21/2004

QC Report : Method Blank Data

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/17/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/17/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/17/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/17/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/17/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/17/2004
Toluene - d8 (Surr)	103		%	EPA 8260B	12/17/2004
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	12/17/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	99.5		%	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	12/18/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/20/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/20/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/20/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/20/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/20/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/20/2004
Toluene - d8 (Surr)	104		%	EPA 8260B	12/20/2004
4-Bromofluorobenzene (Surr)	106		%	EPA 8260B	12/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41529

Date : 12/21/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	41527-02	<0.0050	0.0391	0.0382	0.0332	0.0325	mg/Kg	EPA 8260B	12/17/04	84.9	85.0	0.133	70-130	25
Toluene	41527-02	<0.0050	0.0391	0.0382	0.0345	0.0329	mg/Kg	EPA 8260B	12/17/04	88.1	86.0	2.33	70-130	25
Tert-Butanol	41527-02	<0.0050	0.196	0.191	0.165	0.160	mg/Kg	EPA 8260B	12/17/04	84.4	83.7	0.867	70-130	25
Methyl-t-Butyl Ether	41527-02	<0.0050	0.0391	0.0382	0.0340	0.0327	mg/Kg	EPA 8260B	12/17/04	86.8	85.4	1.54	70-130	25
Benzene	41483-13	<0.0050	0.0382	0.0385	0.0322	0.0350	mg/Kg	EPA 8260B	12/18/04	84.3	90.8	7.34	70-130	25
Toluene	41483-13	<0.0050	0.0382	0.0385	0.0321	0.0348	mg/Kg	EPA 8260B	12/18/04	83.8	90.3	7.44	70-130	25
Tert-Butanol	41483-13	<0.0050	0.191	0.193	0.141	0.158	mg/Kg	EPA 8260B	12/18/04	73.7	82.1	10.9	70-130	25
Methyl-t-Butyl Ether	41483-13	<0.0050	0.0382	0.0385	0.0290	0.0320	mg/Kg	EPA 8260B	12/18/04	75.9	83.0	9.00	70-130	25
Benzene	41527-12	<0.0050	0.0386	0.0378	0.0369	0.0364	mg/Kg	EPA 8260B	12/20/04	95.7	96.3	0.657	70-130	25
Toluene	41527-12	<0.0050	0.0386	0.0378	0.0385	0.0376	mg/Kg	EPA 8260B	12/20/04	99.6	99.4	0.191	70-130	25
Tert-Butanol	41527-12	<0.0050	0.193	0.189	0.180	0.179	mg/Kg	EPA 8260B	12/20/04	93.3	94.5	1.26	70-130	25
Methyl-t-Butyl Ether	41527-12	<0.0050	0.0386	0.0378	0.0364	0.0366	mg/Kg	EPA 8260B	12/20/04	94.4	96.8	2.55	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41529

QC Report : Laboratory Control Sample (LCS)

Date : 12/21/2004

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0369	mg/Kg	EPA 8260B	12/17/04	97.8	70-130
Toluene	0.0369	mg/Kg	EPA 8260B	12/17/04	104	70-130
Tert-Butanol	0.184	mg/Kg	EPA 8260B	12/17/04	98.8	70-130
Methyl-t-Butyl Ether	0.0369	mg/Kg	EPA 8260B	12/17/04	101	70-130
Benzene	0.0397	mg/Kg	EPA 8260B	12/18/04	89.7	70-130
Toluene	0.0397	mg/Kg	EPA 8260B	12/18/04	88.7	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	12/18/04	80.6	70-130
Methyl-t-Butyl Ether	0.0397	mg/Kg	EPA 8260B	12/18/04	82.2	70-130
Benzene	0.0364	mg/Kg	EPA 8260B	12/20/04	93.2	70-130
Toluene	0.0364	mg/Kg	EPA 8260B	12/20/04	98.4	70-130
Tert-Butanol	0.182	mg/Kg	EPA 8260B	12/20/04	93.2	70-130
Methyl-t-Butyl Ether	0.0364	mg/Kg	EPA 8260B	12/20/04	89.0	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Chain of Custody Number: 41529

SECOR Chain-of Custody Record

Field Office: 077 Sacramento
Address: 3017 Kilgore Road, Suite 100
Rancho Cordova, CA

☐ Additional documents are attached, and are part of this Record.
Job Name: 7-Eleven Store #20244
Location: 3625 MacDonald Avenue
Richmond, California

Project # 77EL.20244.04 Task # 0403
Project Manager Jaff Auchterlonie
Laboratory Kiff Analytical
Turnaround Time Standard

Sampler's Name Danielle Catlin-Wright
Sampler's Signature Danielle Catlin-Wright

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/MtBE - EPA 8260	TPHd (Diesel Only) 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile rganics 624/8240 (g=GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)							Comments/ Instructions	Number of Containers	
I-3-10'	12.14.04	9:15	Soil															Hold	1	-01
I-3-15		9:30			X															-02
I-3-20'		9:50			X															-03
I-3-25'		10:10			X															-04
I-2-10'		1:20																Hold		-05
I-2-15'		1:30			X															-06
I-2-20'		1:35			X															-07
I-2-25'		1:45																Hold		-08
I-1-10'	12.15.04	9:05																		-09
I-1-15'		9:15			X															-10
I-1-20'		9:30			X															-11

Special Instructions/Comments
5 Oxygenates: TAME, MtBE, EtBE, TBA, DIPE
Global ID #T0601300710 (SIRC), FPNs: I-1, I-2, I-3
EDF Deliverables (email EDF to dacatlin@secor.com)
email lab results to dacatlin@secor.com, cc: jauchterlonie@secor.com

Relinquished by:
Sign Danielle Catlin-Wright
Print Danielle Catlin-Wright
Company SECOR
Time 1359 Date 12.15.04

Relinquished by:
Sign
Print
Company
Time Date

Received by
Sign
Print
Company
Time Date

Received by Richard Thompson
Sign
Print Richard Thompson
Company Kiff Analytical
Time 1359 Date 12.15.04

Sample Receipt
Total no. of containers:
Chain of custody seals:
Rec'd in good condition/cold:
Conforms to record:

Client: SECOR
Client Contact: D. Catlin-Wrigh
Client Phone: (916) 861-0400 ext. 224

SECOR CUSTREC Rev. 2/99

Date: 12.15.04 Page 1 of 2

Chain of Custody Number: 41529

SECOR Chain-of Custody Record

Field Office: 077 Sacramento
Address: 3017 Kilgore Road, Suite 100
Rancho Cordova, CA

☐ Additional documents are attached, and are part of this Record.
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Project Manager Jaff Auchterlonie
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Sampler's Signature Danielle Catlin-Wright

Analysis Request

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I-1-25'	12.15.04	9:50	Soil		X														1 ~~2~~

Special Instructions/Comments
5 Oxygenates: TAME, MtBE, EtBE, TBA, DIPE
Global ID #T0601300710 (SIRC), FPNs: I-1, I-2 } I-3
EDF Deliverables (email EDF to dacatlin@secor.com)
email lab results to dacatlin@secor.com, cc: jauchterlonie@secor.com

Relinquished by:
Sign Danielle Catlin-Wright
Print Danielle Catlin-Wright
Company SECOR
Time 1359 Date 12.15.04

Received by
Sign
Print
Company
Time Date

Relinquished by:
Sign
Print
Company
Time Date

Received by Richard Thompson
Sign
Print Richard Thompson
Company Kiff Analytical
Time 1359 Date 12-15-04

Sample Receipt
Total no. of containers:
Chain of custody seals:
Rec'd in good condition/cold:
Conforms to record:

Client: SECOR
Client Contact: D. Catlin-Wrigh
Client Phone: (916) 861-0400 ext. 224

SECOR CUSTREC Rev. 2/99

Date: 12.15.04 Page 2 of 2

KIFF ANALYTICAL LLC

Report Number : 41528
Date : 12/21/2004

Danielle Catlin-Wright
SECOR International, Inc.
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670

Subject : 1 Soil Sample
Project Name : 7-Eleven Store #20244
Project Number : 77EL.20244.04

Dear Ms. Catlin-Wright,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 41528

Date : 12/21/2004

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Sample : **SP1 (ABCD)** Matrix : Soil Lab Number : 41528-01

Sample Date :12/15/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	**0.011**	0.0050	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	12/18/2004

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41528

Date : 12/21/2004

QC Report : Method Blank Data

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/18/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/18/2004
Toluene - d8 (Surr)	98.4		%	EPA 8260B	12/18/2004
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	12/18/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41528

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/21/2004

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	41590-02	<0.0050	0.0377	0.0353	0.0350	0.0340	mg/Kg	EPA 8260B	12/18/04	92.8	96.3	3.75	70-130	25
Toluene	41590-02	<0.0050	0.0377	0.0353	0.0348	0.0337	mg/Kg	EPA 8260B	12/18/04	92.4	95.5	3.37	70-130	25
Tert-Butanol	41590-02	<0.0050	0.189	0.176	0.166	0.154	mg/Kg	EPA 8260B	12/18/04	88.2	87.4	0.858	70-130	25
Methyl-t-Butyl Ether	41590-02	<0.0050	0.0377	0.0353	0.0315	0.0310	mg/Kg	EPA 8260B	12/18/04	83.4	87.8	5.04	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41528

QC Report : Laboratory Control Sample (LCS)

Date : 12/21/2004

Project Name : **7-Eleven Store #20244**

Project Number : **77EL.20244.04**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0400	mg/Kg	EPA 8260B	12/17/04	85.3	70-130
Toluene	0.0400	mg/Kg	EPA 8260B	12/17/04	84.8	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	12/17/04	87.9	70-130
Methyl-t-Butyl Ether	0.0400	mg/Kg	EPA 8260B	12/17/04	90.4	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Calscience
Environmental
Laboratories, Inc.

December 20, 2004

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.: 04-12-1008**
Client Reference: 7-Eleven Store # 20244

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/16/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical		Date Received:	12/16/04
2795 2nd Street, Suite 300		Work Order No:	04-12-1008
Davis, CA 95616-6593		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project: 7-Eleven Store # 20244

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SP1 (ABCD)	**04-12-1008-1**	**12/15/04**	**Solid**	**12/16/04**	**12/17/04**	**041216L01**

Parameter	Result	RL	DF	Qual	Units
Lead	5.06	0.50	1		mg/kg

Method Blank	**097-01-002-6,004**	**N/A**	**Solid**	**12/16/04**	**12/16/04**	**041216L01**

Parameter	Result	RL	DF	Qual	Units
Lead	ND	0.500	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Kiff Analytical		Date Received:	12/16/04
2795 2nd Street, Suite 300		Work Order No:	04-12-1008
Davis, CA 95616-6593		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project 7-Eleven Store # 20244

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-12-1011-1	Solid	ICP 3300	12/16/04	12/16/04	041216S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	101	98	75-125	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Kiff Analytical		Date Received:	N/A
2795 2nd Street, Suite 300		Work Order No:	04-12-1008
Davis, CA 95616-6593		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project: 7-Eleven Store # 20244

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-002-6,004	Solid	ICP 3300	12/16/04	041216-I-01	041216L01

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Lead	50.0	53.9	108	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 04-12-1008

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

KIFF ANALYTICAL LLC

2795 Second Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Cal Science Environmental
7440 Lincoln Way
Garden Grove, CA 92841
714-895-5494

Lab No. 1008

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Joel Kiff

Geotracker COELT EDD REPORT? _X_ YES ___ NO

Company/Address: Kiff Analytical, LLC

Sampling Company Log Code: SIRC

Phone No.:

FAX No.:

Global ID: T0601300710

Project Number: 77EL.20244.04

P.O. No.: 41528

EDF Deliverable to (Email Address): inbox@kiffanalytical.com

Project Name: 7-Eleven Store #20244

E-mail address: inbox@kiffanalytical.com

Project Address:

Analysis Request

Date Due:

Sample Designation	Sampling Date	Sampling Time	Container: Glass Jar	Container: Poly	Container: Amber	Container: Sleeve	Container: Tedlar	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Preservative: $Na_2S_2O_3$	Matrix: WATER	Matrix: SOIL	Matrix: AIR	Total Lead								December 22, 2004	For Lab Use Only
SP1 (ABCD)	12/15/04	11:30	1							X				X		X								X	1

Relinquished by:	Date	Time	Received by:	Remarks:
Kiff Analytical Jeremy D Rankin	121504	1900		
Relinquished by:	Date	Time	Received by:	
Relinquished by: C.O.	Date 121604	Time 0830	Received by Laboratory: [signature]	Bill to:

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 04-12-1008

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: KIFF

DATE: 12/16/04

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

2.3 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: NC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Applicable (N/A): _____

Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: NC

COMMENTS:

Chain of Custody Number: 41528

SECOR Chain-of Custody Record

Field Office: 077 Sacramento
Address: 3017 Kilgore Road, Suite 100
Rancho Cordova, CA

☐ Additional documents are attached, and are part of this Record.
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Location: 3625 MacDonald Avenue
Richmond, California

Project # 77EL.20244.04 Task # 0403
Project Manager Jaff Auchterlonie
Laboratory Kiff Analytical
Turnaround Time Standard

Sampler's Name Danielle Catlin-Wright
Sampler's Signature Danielle Catlin-Wright

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/MtBE - EPA 8260	TPHd (Diesel Only) 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (g=GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Total Lead 7421						Comments/ Instructions	Number of Containers
SP1(ABCD)	12·15·04	11:30	Soil		X							X						Pls. Composite 4 into 1	4 → 1

Special Instructions/Comments
5 Oxygenates: TAME, MtBE, EtBE, TBA, DIPE
Global ID #T0601300710 (SIRC), FPNs:
EDF Deliverables (email EDF to dacatlin@secor.com)
email lab results to dacatlin@secor.com, cc:
jauchterlonie@secor.com
Pls. Composite SP1A, SP1B, SP1C & SP1D into ONE soil sample.

Relinquished by:
Sign Danielle Catlin-Wright
Print Danielle Catlin-Wright
Company SECOR
Time 1357 Date 12·15·04

Relinquished by:
Sign
Print
Company
Time Date

Received by
Sign
Print
Company
Time Date

Received by Richard Thompson
Sign
Print Richard Thompson
Company Kiff Analytical
Time 1357 Date 12/15/04

Sample Receipt
Total no. of containers:
Chain of custody seals:
Rec'd in good condition/cold:
Conforms to record:

Client: SECOR
Client Contact: D. Catlin-Wrigh
Client Phone: (916) 861-0400 ext. 224

SECOR CUSTREC Rev. 2/99

Date: 12·15·04 Page 1 of 1

ATTACHMENT F
WASTE DISPSOAL DOCUMENTATION

Well Installation and Oxygen Injection Feasibility Test Report
7-Eleven Store #20244
3625 MacDonald Avenue
Richmond, California 94805-2114
SECOR Project No.: 77EL.20244.05.0502

NO. 644565

NON-HAZARDOUS WASTE DATA FORM

SITE:

NAME: 7-Eleven, Inc. — 7-Eleven #20244

EPA I.D. NO.: [redacted]

ADDRESS: 10220 SW Greenburg Suite #470 — 3625 MACDONALD AVE.

PROBLE [redacted]

CITY, STATE, ZIP: Portland, OR 97223 — RICHMOND, CA

PHONE NO. ( )

CONTAINERS: No. 1 VOLUME 55 gallons WEIGHT

TYPE: [X] TANK TRUCK [ ] DUMP TRUCK [X] DRUMS [ ] CARTONS [ ] OTHER

WASTE DESCRIPTION: NON-HAZARDOUS WATER

GENERATING PROCESS: PURGED GROUNDWATER and/or DECON RINSATE

	COMPONENTS OF WASTE	PPM	%		COMPONENTS OF WASTE	PPM	%
1.	WATER		99-100%	5.			
2.	TPH		< 1%	6.			
3.				7.	BESI# 107761.02		
4.				8.			

PROPERTIES: pH 7-10 [ ] SOLID [ ] LIQUID [ ] SLUDGE [ ] SLURRY [ ] OTHER

HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHING

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

LARRY MOOTHART BESI FOR GENERATOR — 12/27/04

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

NAME: B.E.S.I. — Nieto and Sons

EPA I.D. NO.: [redacted]

ADDRESS: 22971 TOWNE CENTRE DRIVE — 1281 Brea Canyon Road

SERVICE ORDER NO.

CITY, STATE, ZIP: FOOTHILL RANCH, CA 92610 — Brea, CA 92821

PICK UP DATE: 01 - 07 - 05

PHONE NO.: 949-460-5200 — (714) 990-6855

TRUCK, UNIT, I.D. NO.

Steve Nieto (TJ) — 01 - 07 - 05

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

NAME: DeMENNO KERDOON

EPA I.D. NO.: [redacted]

DISPOSAL METHOD

ADDRESS: 2000 N. ALAMEDA STREET

[ ] LANDFILL [XX] OTHER

CITY, STATE, ZIP: COMPTON, CA 90222

RECYCLER

PHONE NO.: 310-537-7100

FAC# 20244

ID# 23992

Eric Thrasher — 01/10/0

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

GEN	OLD/NEW	L	A	TONS	
TRANS		S	B		
C/O		RT/CD		HWDF NONE	DISCREPANCY

TPS Technologies Soil Recycling

Non-Hazardous Soils

Manifest

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPS:	Load #
/ /2004	BELSHIRE	528/733	A07	24199	001

Generator and/or Consultant

Generator's Name and Billing Address: 7-ELEVEN, INC. 1220 SW GREENBURG, STE 470 PORTLAND, OR 97233 ATTN: RANDY MARTIN	Generator's Phone #: Person to Contact: FAX#:	Generator's US EPA ID No. Customer Account Number with TPS:
Consultant's Name and Billing Address:	Consultant's Phone #: Person to Contact: FAX#:	 Customer Account Number with TPS:
Generation Site (Transport from): *(name & address)* 7-ELEVEN #20244 3625 MACDONALD AVE. RICHMOND, CA	Site Phone #: Person to Contact: FAX#:	BTEX Levels TPH Levels AVG. Levels
Designated Facility (Transport to): *(name & address)* TPS TECHNOLOGIES, INC. 12328 HIBISCUS AVENUE ADELANTO, CA 92301	Facility Phone #: 800-862-8001 Person to Contact: DELLENA JEFFREY FAX#: 760-246-8004	Facility Permit Numbers
Transporter Name and Mailing Address: B.E.S.I. 25971 TOWNE CENTRE DRIVE LAKE FOREST, CA 92610 BESI# 107761.02	Transporter's Phone #: 949-460-5200 Person to Contact: LARRY MOOTHART FAX#: 949-460-5210	Transporter's US EPA ID No.: CAD983584681 Transporter's DOT No.: 450647 Customer Account Number with TPS: 1000193

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	7dms		7820	3920	39600
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					1.95

List any exception to items listed above: 117426

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: LARRY MOOTHART (BESI for Generator) Generator ☐ Consultant ☐ Signature and date: [signature] Month 12 Day 27 Year 04

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Art Rodriguez (AGC+) Signature and date: [signature] Month 1 Day 04 Year 05

Recycling Facility

Discrepancies:

FAC# 20244

ID# 23271

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: D. JEFFREY / J. PROVANSAL Signature and date: [signature] 1/4/05

TRANSPORTER COPY